FEB 16 1961

volume 22
number 1
january 1961

Diseases of the Nervous System

MEDICAL LIBRARY
HISTORICAL BUILDING
DES MOINES, IOWA

A Practical Journal on Psychiatry and Neurology

(CONTENTS ON PAGE 4)

Published Monthly by
PHYSICIANS POSTGRADUATE PRESS
277 Broadway - New York 7, New York

Entered as second-class matter at
the Post Office at New York, N. Y.

LIFT THE DEPRESSION

Lift the depression with Marplan. Marplan has been shown to be considerably more potent than certain other amine oxidase regulators. While clinically such increase in potency has heretofore been associated with increased side effects, Marplan strikes a happy balance of potency/safety. Marplan has shown markedly fewer of the side reactions of the hydrazines (such as orthostatic hypotension, constipation, jitteriness, peripheral edema, skin rash). Moreover, throughout the extensive clinical investigations, no liver damage has been reported. Marplan is an amine oxidase regulator, however, and like all of these agents, it is contraindicated in the presence of liver or kidney disease.

Indications range from moderate to severe psychiatric disorders with associated symptoms of depression, withdrawal or regression. Marplan is also valuable as an adjunct in psychotherapy to facilitate the patient's responsiveness. *Complete literature* giving dosage, side effects and precautions is available upon request and should be consulted before prescribing.

Supplied: 10-mg tablets in bottles of 100 and 1000.

Bibliography: **1.** H. F. Darling, W. Kruse, C. F. Hess and M. G. Hoermann, *Dis. Nerv. System*, *20*:269, 1959. **2.** G. C. Griffith, *Clin. Med.*, *6*:1555, 1959. **3.** R. B. Ford, H. E. Branham and J. J. Cleckley, *ibid.*, p. 1559. **4.** H. Azima, H. Durost, D. Arthurs and A. Silver, *Am. J. Psychiat.*, *116*:453, 1959. **5.** L. Alexander and S. R. Lipsett, *Dis. Nerv. System*, *20*:(Suppl.), 26, 1959. **6.** H. F. Darling, *Am. J. Psychiat.*, *116*:355, 1959. **7.** A. L. Scherbel and J. W. Harrison, *Ann. New York Acad. Sc.*, *80*:(Art. 3), 820, 1959. **8.** L. O. Randall and R. E. Bagdon, *ibid.*, p. 626. **9.** G. Zbinden and A. Studer, *ibid.*, p. 873. **10.** O. Resnick, *ibid.*, p. 726. **11.** T. R. Robie, *Dis. Nerv. System*, *20*:182, 1959. **12.** A. Feldstein, H. Hoagland and H. Freeman, *Science*, *130*:500, 1959. **13.** L. O. Randall and R. E. Bagdon, *Dis. Nerv. System*, *19*:539, 1958. **14.** W. Hollander and R. W. Wilkins, in J. H. Moyer, Ed., *Hypertension*, Philadelphia, W. B. Saunders Co., 1959, p. 399. **15.** I. Kimbell and A. Pokorny, paper read at Symposium on Newer Antidepressants and Other Psychotherapeutic Drugs, Galveston, Texas, Nov. 13-14, 1959. **16.** D. Goldman, *ibid.* **17.** J. E. Oltman and S. Friedman, *ibid.* **18.** G. Zbinden, *ibid.* **19.** G. C. Griffith and R. W. Oblath, *ibid.* **20.** H. Freeman, *ibid.* **21.** W. B. Abrams, A. Bernstein, V. D. Mattia, Jr., R. J. Floody and L. O. Randall, Scientific Exhibit, American Medical Association Meeting, Atlantic City, N. J., June 8-12, 1959. **22.** R. W. Oblath, paper read at American Therapeutic Society, 60th Annual Meeting, Atlantic City, N. J., June 6, 1959. **23.** S. L. Cole, *ibid.* **24.** I. Kimbell, Jr., paper read at Cooperative Chemotherapy Studies in Psychiatry, 4th Annual Research Conference, Memphis, Tenn., May 20-22, 1959. **25.** L. O. Randall and R. E. Bagdon, Second Marsilid Symposium, Chicago, May 8, 1958. **26.** W. B. Abrams, D. W. Lewis and M. C. Becker, paper read at the International Symposium on Catecholamines in Cardiovascular Pathology, Burlington, Vt., Aug. 23-26, 1959. **27.** H. I. Russek, *Angiology*, to be published.

MARPLAN®—brand of isocarboxazid

Marplan

ROCHE
LABORATORIES
Division of
Hoffmann-La Roche Inc.

101180

THE FACE OF EPILEPSY 1961

Yesterday he handled $268,743.29—some of it may have been yours. The folks at the bank can't say enough about him. Everyone knows it's only a matter of time until he moves up to the Head Teller's window. Only a few short years ago they might have thought twice about hiring him, much less giving him such a responsible position. He is an epileptic. Today he leads a useful, productive life thanks to your increased knowledge and modern pharmaceutical agents. One of our five distinguished anticonvulsants may be just right for your next patient.

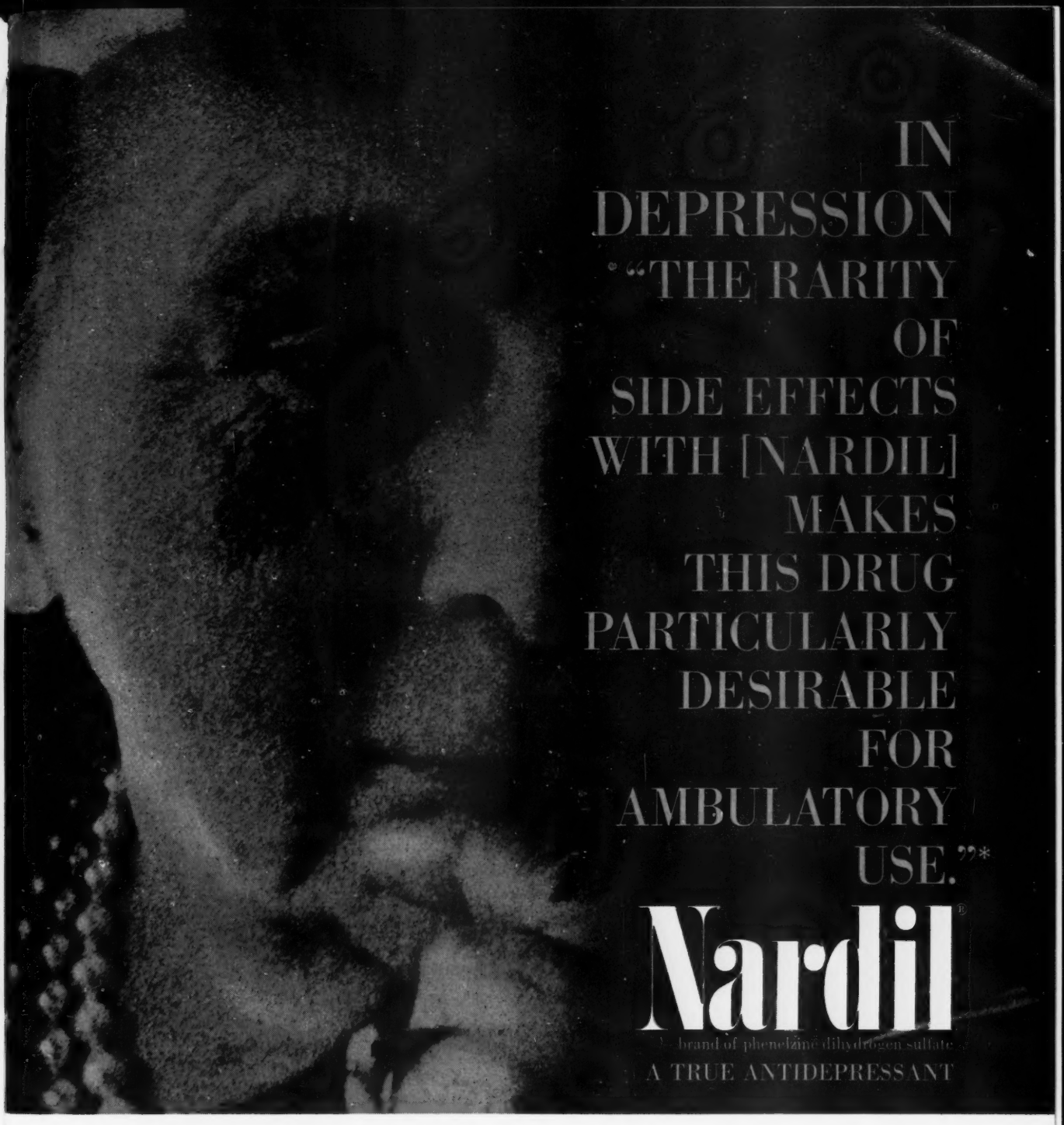
PEGANONE® (Ethotoin, Abbot) offers exceptionally low toxicity in the treatment of grand mal and psychomotor seizures.

PHENURONE® (Phenacemide, Abbott) is often effective where other agents fail. Useful in grand mal, petit mal, psychomotor and mixed seizures.

GEMONIL® (Metharbital, Abbott) is relatively nontoxic. For treatment of grand mal, petit mal, myoclonic and mixed seizures symptomatic of brain damage.

TRIDIONE® (Trimethadione, Abbott) and **PARADIONE**® (Paramethadione, Abbott) are homologous agents. They generally afford symptomatic control of petit mal, myoclonic and akinetic seizures.

ABBOTT



IN DEPRESSION "THE RARITY OF SIDE EFFECTS WITH [NARDIL] MAKES THIS DRUG PARTICULARLY DESIRABLE FOR AMBULATORY USE."*

Nardil®

brand of phenelzine dihydrogen sulfate

A TRUE ANTIDEPRESSANT

"Based on the results of a clinical trial with 150 ambulatory private patients, [Nardil]... has been highly effective in relieving severe depressive states."*

Nardil is rapidly effective—antidepressant response may be seen in a week, although complete remissions usually take from two to six weeks of continuous therapy.

"[Nardil] has distinct advantages...primarily because of the relative absence of side effects..."*

Nardil has an excellent safety record—established by over 100 scientific reports, and confirmed by a minimal incidence of toxicity in more than several hundred thousand patients to date.

Full dosage information, available on request, should be consulted before initiating therapy.

*Furst, W., M.D., F.A.P.A. (Attending Neuropsychiatrist, East Orange General Hospital, East Orange, N. J.): Psychopharmacological or Electrical Therapy of Severe Endogenous Depression, *J. M. Soc. New Jersey* 57:3 (March) 1960.

WARNER CHILCOTT

MORRIS PLAINS, N.J.

—P521

makers of TEDRAL GELUSIL PROLOID PERITRATE MANDELAMINE

Volume XXII JANUARY 1961 Number 1

DISEASES *of the* Nervous System

Contents

PATTERNS 13
Julius Heuscher

ELECTRIC SHOCK THERAPY—A MISNOMER 18
Ernest C. Miller and Martha Kelly

CHEMOTHERAPEUTIC TRIALS IN PSYCHOSIS. IV 23
Wm. J. Turner, Victoria Hania, Seymour Halpern and Sidney Merlis

DE-INSTITUTIONALIZATION OF PATIENTS 26
M. G. Evangelakis

COMPLICATIONS IN TRILAFON THERAPY 32
Henry R. Olivier and Max Sugar

PERFECTIONISM AND PSEUDO-PERFECTIONISM 35
Jerome M. Schneck

PROBLEMS IN PROVIDING PSYCHIATRIC CONSULTATION TO RURAL PHYSICIANS 38
John S. Visher

CLINICAL EXPERIENCE WITH TARACTAN 40
F. Cornu and H. Hoffet

AMBULATORY PSYCHOTHERAPY FOR THE SCHIZOPHRENIC PATIENT WITH THE AID OF DRUGS 45
F. Kant and H. B. Abele

THE PASSIVE AGGRESSIVE ALCOHOLIC PERSONALITY 49
Edward Podolsky

SURVIVAL FOLLOWING OVERDOSE OF THALIDOMIDE 52
Guenther Neuhaus and Karla Ibe

REFUSAL OF SURGICAL THERAPY AS AN IMMEDIATE LIFE SAVING PROCEDURE 54
Jacob H. Friedman and Fannie I. Kapp

EDITOR
Titus H. Harris, M.D. 112 North Boulevard, Galveston, Texas

MANAGING EDITOR
George Bisgeir, B.S., LL.B. New York, New York

ASSOCIATE EDITORS

A. F. Bennett, M.D.---Berkeley, California
Francis J. Braceland, M.D.---Hartford, Conn.
Franklin G. Ebaugh, M.D.---Denver, Colorado
Hamilton Ford, M.D.---Galveston, Texas
Walter Freeman, M.D.---Los Altos, California
A. Hauser, M.D.---Houston, Texas
David J. Impastato, M.D.---New York, N. Y.
Louis J. Karnosh, M.D.---Cleveland, Ohio
Frank H. Luton, M.D.---Nashville, Tennessee
Wm. Malamud, M.D.---Boston, Mass.
Karl A. Menninger, M.D.---Topeka, Kansas
Hans H. Reese, M.D.---Madison, Wisconsin
Lewis J. Siegal, M.D.---New York, New York
Harry C. Solomon, M.D.---Boston, Mass.
S. Bernard Wortis, M.D.---New York, N. Y.

YEARLY SUBSCRIPTION $10.00
Foreign Subscription $11.50

The untapped potential of Librium

Librium, as thousands of physicians have discovered, is an extraordinarily effective agent for the relief of anxiety, agitation and tension. But the fact that Librium can produce dramatic results—often in previously refractory cases—should not restrict its use, exclusively or even primarily, to the more "difficult" patient. Actually, reactions to temporary or environmental stress can often be alleviated with a prescription for Librium. Many disturbances of gastrointestinal or cardiovascular function contain emotional components strikingly amenable to Librium therapy. So do certain gynecologic and dermatologic conditions. You will find new Librium 5 mg particularly suitable for this type of treatment. Librium 5 mg is also recommended for children and geriatric patients, in the presence of debilitating disease, and wherever a more flexible dosage schedule is desirable.

ROCHE
LABORATORIES
Division of Hoffmann-La Roche Inc.

Consult literature and dosage instructions, available on request, before prescribing.

LIBRIUM

the successor to the tranquilizers

LIBRIUM® Hydrochloride – 7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride

AN OFFICIALLY APPROVED INSTRUMENT
WHICH HAS ALSO WON POPULAR APPROVAL.

the REITER MOL-AC II

for

UNEQUALLED EASE OF OPERATION

in

A.C. SHOCK THERAPY

SAFE

The MOL-AC II, provides the highest degree of complete electrical isolation, by far exceeding official code requirements, to assure the maximum in safe operation.

EFFECTIVE

Clinical results have been uniformly excellent. Side effects are automatically reduced. The MOL-AC II is acclaimed internationally by leading physicians and institutions.

AUTOMATIC

The MOL-AC II provides a highest initial current to initiate seizure pattern with an automatic reduction to safe low voltage in every case. Instantly and automatically re-set for repeated treatments. With the MOL-AC II, doctors report they are now certain of full seizure each treatment even with large doses of muscle relaxants.

EASY TO USE

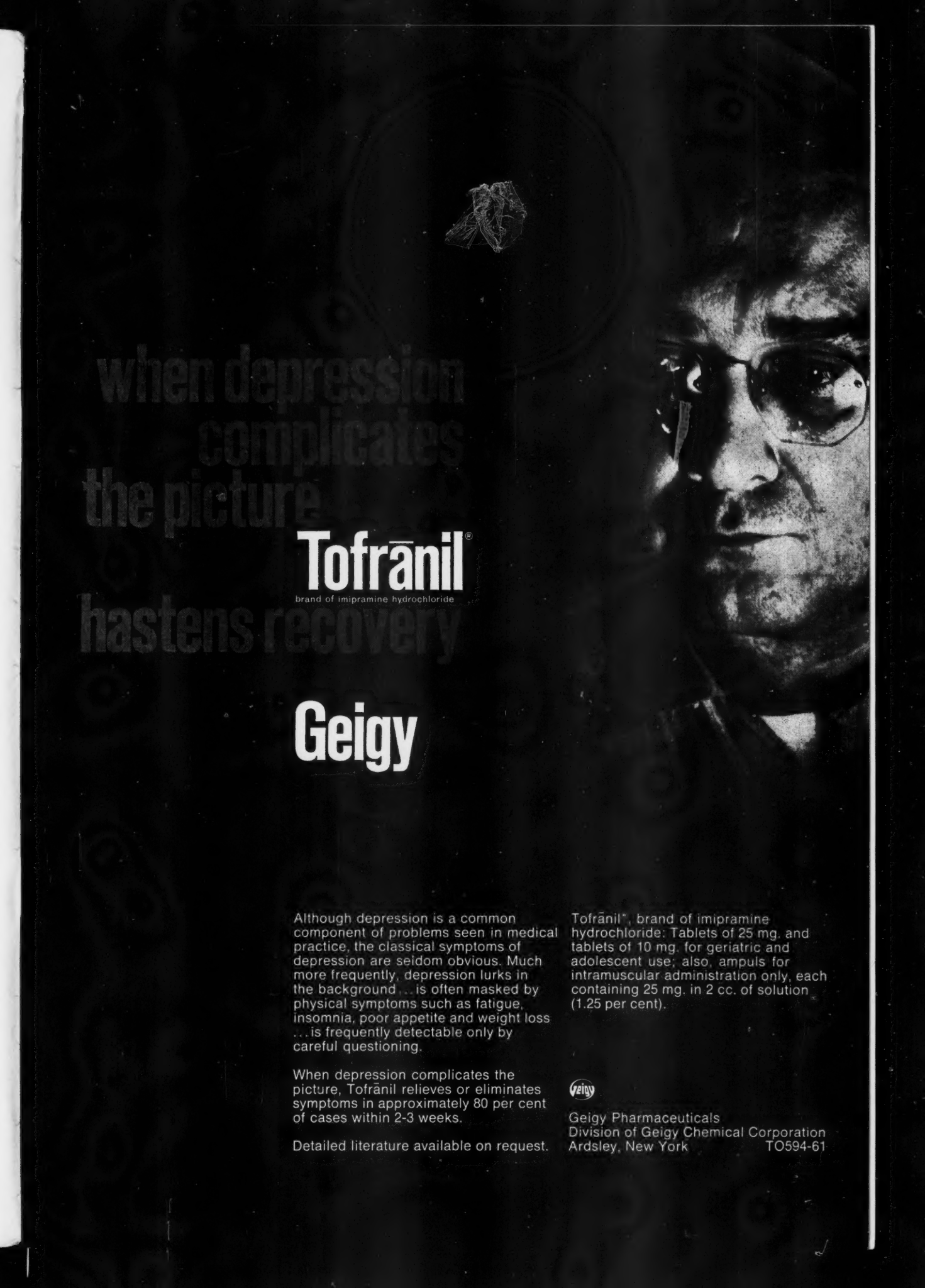
Controls are simplified — one 3-position current intensity dial and one treatment switch. Just plug in ordinary AC current and the MOL-AC II is ready for immediate use. The MOL-AC II has a handsome walnut case. Attractively priced at $100.00 complete with finest physician's bag of genuine leather and attachments.

DURABLE

Ingenious design with only one moving part. Remarkable freedom from service requirement.

Also available—Reiter Model SOS, the advanced, most efficient instrument combining the strongest convulsive UNIDIRECTIONAL currents with powerful yet gentle sedative currents. (Many additional features included.) Literature on request.

REUBEN REITER, Sc.D. 64 WEST 48th ST., NEW YORK 36, N. Y.



Although depression is a common component of problems seen in medical practice, the classical symptoms of depression are seldom obvious. Much more frequently, depression lurks in the background . . . is often masked by physical symptoms such as fatigue, insomnia, poor appetite and weight loss . . . is frequently detectable only by careful questioning.

When depression complicates the picture, Tofranil relieves or eliminates symptoms in approximately 80 per cent of cases within 2-3 weeks.

Detailed literature available on request.

Tofranil®, brand of imipramine hydrochloride: Tablets of 25 mg. and tablets of 10 mg. for geriatric and adolescent use; also, ampuls for intramuscular administration only, each containing 25 mg. in 2 cc. of solution (1.25 per cent).

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York TO594-61

"the most effective drug against tremor..."[1]

IN PARKINSONISM Parsidol exceeds all other drugs for reducing tremor,[1] a major impairment in this disease. Parsidol also lessens rigidity, brightens the patient's mood and contributes to restoration of self-confidence. Especially well tolerated by older patients,[1,2,3] Parsidol is effective alone, and most patients respond well to a maintenance dosage of 50 mg. q.i.d. Parsidol is compatible with other antiparkinsonian drugs and can be given in combination if so desired.

PARSIDOL®

brand of ethopropazine hydrochloride

PARKINSONISM

WARNER CHILCOTT
MORRIS PLAINS, N.J.

1. Schwab, R. S. and England, A. C.: *J. Chron. Dis. 8*:488 (Oct.) 1958.
2. Schwab, R. S.: *Geriatrics 14*:545 (Sept.) 1959.
3. Doshay, L. J. *et al.: J.A.M.A. 160*:348 (Feb. 4) 1956.

PAR-GP04

In the treatment of 21 severely retarded patients,

Stelazine® "was superior
brand of trifluoperazine

to any of the drugs previously used. . . ."

Vasconcellos[1] administered 'Stelazine' to 21 mentally retarded patients, 15 of whom showed EEG evidence of brain damage. Their I.Q.'s ranged from 14 to 79, and their ages from 14 to 29 years. All had severe behavior problems, manifested in such ways as self-mutilation, destruction to property, soiling, overt masturbation and general unmanageability.

Over a period of seven months, 'Stelazine' therapy "resulted in marked improvement in [this] group of 21 patients . . . all of whom had received previous ataractic medication unsuccessfully." The author concluded that 'Stelazine' "was superior to any of the drugs previously used in the management of this group of patients."

1. Vasconcellos, J.: Clinical Evaluation of Trifluoperazine in Maximum-Security Brain Damaged Patients with Severe Behavioral Disorders, J. Clin. & Exper. Psychopath. *21*:25 (Jan.-Mar.) 1960.

Smith Kline & French Laboratories

SK&F *leaders in psychopharmaceutical research*

Why Deprol is the first drug to use in depressions

Clinical reports indicate that many depressions can be relieved by Deprol and psychotherapy, without recourse to more hazardous drugs or EST.

Deprol relieves the patient's related anxiety, insomnia and anorexia without danger of overstimulation, thus permitting better rapport to be established sooner, and facilitating more effective treatment.

Deprol acts without undue delay. Its effect can be determined quickly. If unusual cases require additional or alternative therapy, this will be quickly discernible.

Deprol can be controlled – there is no lag period of a week or two over which drug effects continue after medication is stopped. In cases where alternative therapy may be needed, it can be started at once.

Deprol is safe – does not produce liver damage, hypotension, psychotic reactions or changes in sexual function; does not interfere with other drug therapies.

▲Deprol▲®

benactyzine + meprobamate

Composition: Each tablet contains 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets.

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

WALLACE LABORATORIES
Cranbury, N. J.

Bibliography *(11 clinical studies, 764 patients):*
1. Alexander, L. (35 patients): Chemotherapy of depression–Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. 166:1019, March 1, 1958. **2.** Bateman, J. C. and Carlton, H. N. (50 patients): Meprobamate and benactyzine hydrochloride (Deprol) as adjunctive therapy for patients with advanced cancer. Antibiotic Med. & Clin. Therapy 6:648, Nov. 1959. **3.** Bell, J. L., Tauber, H., Santy, A. and Pulito, F. (77 patients): Treatment of depressive states in office practice. Dis. Nerv. System 20:263, June 1959. **4.** Breitner, C. (31 patients): On mental depressions. Dis. Nerv. System 20:142, (Section Two), May 1959. **5.** Landman, M. E. (50 patients): Choosing the right drug for the patient. Submitted for publication, 1960. **6.** McClure, C. W., Papas, P. N., Speare, G. S., Palmer, E., Slattery, J. J., Konefal, S. H., Henken, B. S., Wood, C. A. and Ceresia, G. B. (128 patients): Treatment of depression–New technics and therapy. Am. Pract. & Digest Treat. 10:1525, Sept. 1959. **7.** Pennington, V. M. (105 patients): Meprobamate-benactyzine (Deprol) in the treatment of chronic brain syndrome, schizophrenia and senility. J. Am. Geriatrics Soc. 7:656, Aug. 1959. **8.** Rickels, K. and Ewing, J. H. (35 patients): Deprol in depressive conditions. Dis. Nerv. System 20:364, (Section One), Aug. 1959. **9.** Ruchwarger, A. (87 patients): Use of Deprol (meprobamate combined with benactyzine hydrochloride) in the office treatment of depression. M. Ann. District of Columbia 28:438, Aug. 1959. **10.** Settel, E. (52 patients): Treatment of depression in the elderly with a meprobamate-benactyzine hydrochloride combination (Deprol). Antibiotic Med. & Clin. Therapy 7:28, Jan. 1960. **11.** Splitter, S. R. (84 patients): The care of the anxious and the depressed. Submitted for publication, 1959.

CD-960

NEW!

FOR YOUR

next nervous patient...

the 3-way, safe, synergistic calmative

AMRIL T.M.

NON-BARBITURATE

combination of 3 components in low dosage acts synergistically for greater therapeutic range and less toxicity[1,2]

acetylcarbromal	200 mg.	acts at the cortical area
mephenesin	150 mg.	affects motor center to produce muscular relaxation
reserpine	0.05 mg.	depresses overactivity at the hypothalamus

AMRIL *sedates gently to produce daytime calm, nighttime rest without that "drugged" feeling*

INDICATIONS: As a daytime sedative to reduce anxiety and tension in patients who show signs of nervousness, hyperexcitability and emotional upset; also to induce sleep in cases of insomnia.

DOSAGE: As a sedative, 1 AMRIL tablet two or three times daily. For sleep, 2 tablets before retiring.

SUPPLIED: Boxes of 50 and 100 tablets.

REFERENCES: (1) Batterman, R. C., Leifer, P. and Grossman, A. J.: The Advantages of a New Combination Sedative Mixture, Am. Pract. & Digest Treat. 7:1795 (Nov.) 1955. (2) Kolodny, L. A. and Fuller, R. H.: Combination Sedative in Emotionally Disturbed Office Patients, Dis. Nerv. System, 21:220 (April) 1960.

A G **AMFRE-GRANT, INC.** BROOKLYN 26, NEW YORK

grounds privileges

control of symptoms assured and no more "pills" until bedtime with q12h Thorazine® Spansule® therapy

brand of chlorpromazine brand of sustained release capsules

N.B.: For complete information on indications, dosage, side effects, cautions and contraindications, see: *Thorazine® Reference Manual, The Treatment of Hospitalized Psychiatric Patients with Thorazine®,* or your SK&F representative. Full information is also on file with your pharmacist.

Smith Kline & French Laboratories, Philadelphia SK&F leaders in psychopharmaceutical research

Volume XXII JANUARY 1961 Number 1

DISEASES *of the* Nervous System

A PRACTICAL JOURNAL ON PSYCHIATRY AND NEUROLOGY

MEDICAL LIBRARY
HISTORICAL BUILDING
DES MOINES, IOWA

Patterns

JULIUS HEUSCHER, M.D.

In dealing with psychologic and psychopathologic theories and their repercussions on psychotherapy, we are confronted with such a multitude of views and opinions that one is likely to become quite confused unless he is firmly entrenched in a single school of thought. While the antagonism between "organicists" and "psychoanalysts" has greatly lessened, it is the result not only of a partial integration of their different approaches, but also of an increasing feeling of tolerant skepticism and relativism. Bleulerians, Freudians, Jungians, and Adlerians, phenomenologists and existential-analysts have come to accept coexistence. However, coexistence contains a certain amount of defeatism.[1]

Even within the camps of the "organicists," "analysts" and "existentialists" we encounter numerous views which appear mutually more or less exclusive. In the first place differences arise out of one-sided emphasis of factors allegedly underlying psychic processes, drives for power, sexual instincts, genetic influences, interpersonal relationships, the individual's world design, changing hormonal processes, etc. In the second place, the differences are multiplied and complicated by each "school's" philosophy concerning the nature and value of psychologic processes and their relationship to the "soma." For example, Jung's concepts of the archetypes[2] and F. Kallmann's[3] ideas concerning the heredity of schizophrenia, are both founded on genetic considerations; yet in many ways their orientations differ greatly. Any haphazard eclecticism will therefore risk grasping some valuable and many trivial or weak aspects of various systems, combining them into a disharmonious whole. It may then be preferable to adhere to one school only and to further one's therapeutic skills or scientific knowledge within the framework of this school. True eclecticism is possible only to the extent of our ability to develop and recognize a frame of reference which can throw light on the meaning of various, often seemingly contradictory findings, or theoretical deductions.

The scope of this paper is to clarify such a frame of reference, and to help co-ordinate and integrate different psychologic ideas. Simply to point out and illustrate the relativity of various opinions, convictions and theories is inadequate. The past century has already outdone itself in attempts to create doubt and skepticism in regard to almost every field of scientific and spiritual endeavor and interest. We have become oversaturated with the idea that the discoveries of today will be disproved or modified by those of tomorrow, that our own moral convictions contrast with equally effective convictions of other ethnic groups, that our social structure is nothing absolute and that our artistic criteria vary greatly from decade to decade. Similarly we view the various religious denominations as ineffective collections of unproven assertions in regard to the spiritual world. The skepticism born out of this overemphasized relativity, while doing away with many narrow prejudices and opening large vistas in heretofore unsuspected directions, is bound to lead toward an even greater emotional and moral superficiality. This dilemma finds an expression in Heidegger's[4] earlier existentialist writings, in which the human being is seen as

coming from nowhere, as going nowhere, and as incapable of finding an answer to his basic questions through philosophy.

It appears difficult to counteract this relativism and skepticism, unless we understand its sources. Obviously most thoughts, opinions and observations concerning anything are one-sided and restricted. The main reason for this is that almost everything is so complex that understanding it, will depend on the length of observation as well as upon the purpose and the emotional and intellectual development of the observer. How differently would a simple object such as an apple be described by a child, a botanist, a farmer and a minister! In trying to understand certain aspects or parts of our world, we usually are compelled, both consciously and unconsciously, to limit our scope. We chose the expression "PATTERN" to designate the totality of limiting factors. The choice of this expression was prompted by the analogy of having "grids" or "screens" of various patterns interposed between the observer and the observed. However, this analogy could be misleading. While a screen eliminates some parts or qualities of a given object, it is the function of our "pattern" to promote the understanding of at least some aspects of this object. The paradox consists in the fact that the pattern furthers understanding by limiting the fullness of our experience. The limiting factors are of different orders and only the totality of these factors establishes the pattern which shapes our experience, opinion or knowledge. By grouping these factors in the following categories, we may further illustrate the nature of the patterns.

1) The types and accuracy of our sense-organs can affect the pattern active in a certain experience. Let us compare the descriptions of an opera and of a symphony concert by a deaf and by a blind person: The descriptions of the opera would diverge in some aspects and agree in others, whereas the descriptions of the symphony concert would be almost totally different. Unless we were aware of the different "sense-organ-patterns" underlying the two descriptions, we would feel that at least one of them must be erroneous. Finally, the description of the opera by a deaf *and* blind person, noting only the vibrations from the drums, the passing of many people and the temperature and odor changes of the air, would appear extremely strange. When we compare these accounts by people with sensory defects, it is, however, quite easy to become aware of the patterns which shaped their experience, and we then realize that each one was right. Unfortunately, we often do not consider accurately the underlying patterns when we deal with apparently contradictory opinions or evaluations which may be the result of other than sense-organ-patterns. Maybe, if we could understand these more "hidden" patterns, the apparently contradictory opinions would help us to a fuller understanding, just as the combined description of the opera by the deaf and by the blind person would give us a fuller appreciation of the opera. What are some of these other factors that determine the less obvious aspects of patterns? Any grouping of these factors will be somewhat arbitrary, but for the sake of conciseness we shall only mention the constitutional, the early environmental and the cultural factors, in order to then give more attention to what we call ego-patterns.

2) The constitutional factors, such as are operative in intelligence, in basic drives and in language-formation, affect the way we experience and understand the world. Jung[2] in his ideas concerning archetypes, tried to greatly widen the importance of these constitutional factors.

3) Patterns are further shaped by factors which are the result of early training and conditioning, particularly by the formation of the "superego."

4) While this early training and conditioning is indirectly a result of the artistic, intellectual, ethical and religious bent of the community, this influence of the community upon the viewpoint of the individual continues throughout his life.

5) What we describe as "ego-pattern" is partially affected by all the above factors, but distinguishes itself by the fact that it represents a more purposeful, deliberate re-

striction of the viewpoint or of the problem. This restriction may enable us to discover expediently and precisely various aspects of the observed item. We chose the term "ego-patterns" since—in conformity with the function attributed psychoanalytically to the ego—their main purpose is furthering our knowledge of, and orientation in, the spiritual, moral and physical world surrounding us. There is a large number of possible ego-patterns, and the choice of any one of them will depend not only on the individual, but also on the item observed. A criminal will be viewed differently by the district attorney, by the juror, by the minister, by the existential-analyst and by the psychoanalyst. Unfortunately we give too little attention to the pattern used in obtaining certain information; if we were fully acquainted with the pattern, we would understand in which way any given information is valid.

In order to clarify the foregoing remarks, we would like first to briefly contrast the patterns of the psychoanalyst and the existential analyst, and finally to illustrate this contrast by a short case history:

Freud's psychoanalysis is strongly rooted in the natural-scientific frame of reference of the past century. At that time natural science triumphed because of its tremendous contributions to our knowledge, well being and comfort, and because of the rapid decline, in most communities, of a deeply felt religious orientation. We could say that the main factor in the pattern of the natural-scientist was the limitation of his interest to measurable quantities and their causal relationships. In psychoanalysis this prime interest in measurable factors was reflected in the emphasis of the dynamic interrelationship of drives, both within the individual and between the individual and the environment. The essence of a psychologic experience, be it a feeling, a sensation or a value, usually did not fall within the scope of the psychoanalytic pattern and was therefore neglected. Hence the tendency, for example, to confuse the reasons for choosing a certain value with the value itself.[5] The biologic-dynamic concept of the structure of the human psyche retains its full importance and truth as long as we remain aware of the natural-scientific pattern which made it possible.

However, if we forget that there are other ways to view the psyche, we may eventually be dismayed to see that, even the individual freed from excessive domination by unconscious conflicts, is losing more and more the ability and opportunity to act as a free human being. He finds himself goal-less in a meaning-less world. Out of this need to see the meaning—be it even the lack of meaning—of the world, the different existentialist schools of thought have flourished. And so we can discern two important orientations towards the world in general and the human psyche in particular. One is analytical, genetic and mechanistic, the other is explaining-revealing. The first seeks what is measurable or calculable, the second deals with the meaning of things. The first has been leading to progressively more spectacular successes and accomplishments at the risk of unbalancing the totality more and more and of ever greater meaninglessness. The second is always meaningful, but risks to appear primitive, vague or illogical, unless it is supported by great accuracy of thought and perception. Unfortunately, this explaining-revealing orientation towards life has weakened in our contemporary civilization which has been so proud and satisfied with its natural-scientific achievements.

As this orientation appears weak and vague, even more people tend to feel that the analytic-mechanistic orientation can and will replace it entirely. The displacement of our attention from the meaning of things to the dynamic interrelationship between things has largely gained such proportions, that a deep feeling for the meaning of the thing itself has been lost. We may still sense, that there is an essential, meaningful, non-measurable aspect in all that we are able to perceive of this world, but since it does not easily fit into our natural-scientific thinking, we either discount its importance, or we consider it only in a completely separate category as values, religious beliefs, and esthetic opinions. Yet a simple description of the earth as a big saucer across which

Phoebos flies with his horse-drawn suncarriage may give us more the impression of meaningfulness than the most advanced natural-scientific theory of the universe. I am sure that the ancient Greeks were aware of the mechanistic illogicity of their belief, but their search for meaningfulness overshadowed any mechanistic considerations.

We have become more and more like the man with the stone heart in Hauff's[6] beautiful tale: We may have everything we want, but it has no meaning. And with him we share a vague hope that our knowledge, that at one time things were different, may lead us to again experience them as meaningful.

Being aware that the psychoanalytic pattern is one primarily comprehending quantitative, dynamic interrelationships and that the existential-analytic pattern solely deals with meaningfulness, we proceed now to a short case history in which the alternate use of the two patterns may give a wider understanding of this patient.

This patient was suffering from a severe anxiety neurosis with intense fear of a heart attack which could be related dynamically to several situations in his formative years which led to intense guilt feelings. Paramount was his rivalry with his one year older brother and his father for his mother's affection. His bed-wetting appeared to be an expression of this rivalry. Furthermore, it created additional hardship for the mother, so that when she died of pneumonia—in the same hospital in which our patient was circumcised at the same time—he was blamed for her death. He was able to continue functioning fairly adequately, but developed acute symptoms of chest pain and hyperventilation shortly after one of his sons died of suffocation. To the almost imperceptible strain between forbidden—intolerable feelings and numerous defenses were now added acute symptoms. The man became emotionally ill, when guilt feelings over the death of his son disturbed the already precarious dynamic balance.

Then,however, we can ask ourselves not only what forces shaped his present condition, but also what his present world looks and feels like, to him.[7,8] We then find that *one* theme around which most of his existence centers is that of "dying." Everything can only be seen as dying: the trees in his yard, his newborn child, himself, and even the mineral world around him. To him, life is only a delay in dying, a delay which can be prolonged by constant, absolute, concentrated vigilance. And since this absolute vigilance is an impossibility, dying is always there. In the middle of an interview, at work, at home, suddenly this "realization" that he, his child, are dying without anyone else realizing it, overcomes the patient. While *dying* is always just around the corner, "death" itself does not exist. His mother cannot really be dead and he himself must be physically immortal. At one time during his therapy, he brought out that his reason for seeing me was to find confirmation that his mother was not dead, and that psychotherapy was a fraud, since it was unable to give him this confirmation. While death is denied, dying assumes a fascinating appeal.

This was best shown by his strange interest in a special method of killing caterpillars: He removes the lead from a pencil and through the barrel thus created he blows hard, sharply pointed grassblades into the soft skin of the little animals, one after another, carefully observing their "dying." In this cruel game he created a situation in which he could observe the process of dying separately from death. In fact, after a certain amount of punishment, the animals would invariably drop off the plant, disappear between the leaves or the grass and the patient never checked to see whether they were dead.

A similar preoccupation with dying occurred when he was led to his mother's bedside in the hospital. He could not find anything to say to her and helplessly he looked longingly at some oranges on a nearby table. Much of his later fixation on "dying" and immortality seems to have originated here in connection with his feelings of bewilderment, helplessness and guilt in front of the dying mother. It left a deep belief that "dying" could be done away with, if ever the proper thing could be done or said. So his orientation in his world became that of a Don Quixote in search for the secret of dying, whereby the finding of this secret and the mastery of dying became equated.

This central theme can give additional meaning to various aspects of the patient's present and past life. His bedwetting, which he came to experience as an act of aggression which killed his mother, was also felt as bleeding, and the bleeding as dying. The bedwetting also tied in with the grandmother's belief that men were sexual beasts and this tied in with various phantasies linking sexual penetration, killing and dying. Furthermore, his not crying after the mother's death has to do with keeping mother alive, since crying has to do with wetting, with killing and with dying (or "crying oneself to death"). The circumcision performed on the patient just before the mother's death reinforced this attempt at controlling penetration and soiling. Yet, holding the urine back was like becoming full of evil. Thus the precarious and hopeless balance between holding in and expressing. And we can follow his interest in this precarious balance in all phases of his life, even in his profession as an engineer, where his keen interest in the mechanism and the fading out of vibrations has led him to be an expert. But, to the patient, this balance between

death and life, holding-in and expression, is ultimately doomed, as he states quite simply by saying: "Life is like a spinning top."

We see from this condensed case history, how the two patterns reveal two different aspects of the patient's illness. One might equally well have approached his difficulties with a pattern restricted to physiological data and we would probably have gained an interesting picture of the interrelation between his constitutional physiologic reactions to outward stimuli, resulting biochemical changes, and hyperventilation symptoms. In fact, several other patterns could have been applied to the study of his problems, each one revealing some new information.

Let me conclude by saying that the less prejudiced and the more persistent we are in considering all kinds of approaches to the study of life-problems, the richer and more colorful is the picture that unfolds. Any conclusion I reach by using any *one* pattern represents a truth.[9] My opinion or findings could only be called "relative" inasmuch as my own limitations in maturity, intelligence and spiritual development may induce me to look at a situation with such patterns as allow only a restricted or one-sided observation. I may then see the same situation so differently from my fellow man, that our conclusions, based on what we saw, appear contradictory. This, however, could lead to skepticism only, if one does not remain fully aware of the different patterns used. If one considers the patterns involved as carefully as the seemingly contradictory opinions and conclusions, the latter can be integrated in a deeper and wider knowledge. If we are primarily interested in the reasons *why* a person sees a problem in a certain way, we will develop our ability for tolerance and love, and deepen our understanding of the problem.

Summary

Any attempt to understand our world requires a limitation of scope. The factors responsible for this limitation are chosen partly deliberately, partly only dimly in our consciousness, and partly completely beyond our awareness. We used the term "Pattern" to designate the totality of factors involved in the limitation of scope in any one observation. We then find that apparently contradictory observations and conclusions often become complementary, as soon as we succeed in recognizing the different "Patterns" used by the various observers. This is particularly true when we deal with the findings of different psychiatric schools of thought. Any worthwhile eclecticism has to focus primarily on the nature of the "Patterns" used in different psychiatric observations and theories. Viewing the case history of a patient suffering from a severe anxiety neurosis first from a psychoanalytic, then from an existential-analytic standpoint, we tried to show the usefulness of the application of different "Patterns."

491 N. Santa Cruz Ave.,, Los Gatos,, Cal.

REFERENCES

1. Marcel, G.: Un changement d'esperance." *Librairie Plon,* Paris, 1958.
2. Jacobi, J.: "Die Psychologie von C. G. Jung." *Rascher Verlag,* Zuerich, 1940.
3. Kallmann, F. J.: *Amer. J. of Psychiat.,* 98, p. 733, 1942.
4. Weischedel, W.: "Wesen und Grenzen der Existenzphilosophie." (Mimeographed copy.)
5. Heuscher, J. E.: Psychotherapy and Human Values. *Confinia Psychiat.,* No. 2, p. 110, 1959.
6. Hauff, W.: "Das kalte Herz." *Hallauer Verlag,* Zuerich.
7. Boss, M.: "Der Traum." *Hans Huber Verlag,* Bern, 1953.
8. May, R.: "Existence." *Basic Books Inc., Publ.,* N. Y., 1958.
9. Grassi, E., and v. Uexküll, T.: "Die Einhteit unseres Wirklichkeitsbildes." *Leo Lehnen Verlag,* München, 1951.

Electric Shock Therapy—A Misnomer

ERNEST C. MILLER, M.D., and MARTHA KELLY, PH.D.

From the time of its introduction in 1937 by Cerletti and Bini, electroconvulsive therapy has proven itself an effective adjunct in the treatment of the mentally ill. The decrease in hospitalization time and the quality of improvement in patients prudently selected for this form of treatment is amply evident.

Though the procedure is painless, with minimal side effects, and a mortality rate of less than 0.08 per cent,[1] the almost invariable response of the patient to the need of "shock" treatment is a refusal. The families of such patients more often than not seem to show a similarly anxious response when apprised that such treatment is indicated for a family member. This suggested to the principal investigator that the resistance was not solely a function of emotional disturbance. That so many persons submit themselves, or allow their relatives to undergo this particular treatment is indeed testimony of the faith of the public in the medical profession. Under what other circumstances would anyone agree to being "shocked"?

It is most interesting that a word of such impact and unpleasant connotation is promulgated by physicians who are especially dedicated, among other things, to the reduction of inappropriate anxiety. Certainly one might argue that no matter what words a physician uses to describe a somatic therapy to a patient, there will probably be some trace of anxiety. Admittedly any major medical procedure carries an implicit threat, for there is always the possibility that death may intervene. If one is concerned, however, with the cause and reduction of inappropriate emergency response, the conditioning effect of words should not be ignored. Contemplate for a moment the feelings of a patient with acute appendicitis when informed by the attending surgeon, "Mr. Jones, we're going to have to *butcher* you."

Words are generally classified as "referential" or "emotive." Referential words are those respectable ones which refer to objects, actions, or situations, which can be pointed out or described;[2] these are the words of objective thought. Emotive words are those, which as the name implies, convey feeling, tone, and intention. These are verbalizations whereby a speaker expresses affect, usually with the intention of exciting affect within the listener. Some words may function in either capacity, a quality which depends upon context.

The term, "electric shock therapy," especially would seem to bear scrutiny in this framework. The word "electrical" when used as modifier to words such as "current," or "discharge," serves a referential function. It may also assume emotive qualities as in the statement, "She has an electrifying personality." By and large, however, electrical may be considered primarily a referential word. "Therapy" though a somewhat nonspecific symbol (especially in the art of psychiatry), generally relates to a describable situation, and may be considered for our purpose to be a fairly substantial referential word.

"Shock" is an emotive word in all areas of communication outside of medicine. Within the profession it has acquired a referential respectability as a symbol designating certain physiological and sometimes psychological phenomena which occur secondary to trauma. To the laity, most of whom do not share in this enlightenment the word has almost absolute association with behavior related to avoidance. Meerloo[3] defines shock as:

> "The unadapted defense reaction of the organism to sudden mental and physical injury, during which times are exhibited all types of vegetative and psychological changes which impede a cure."

This appears to be a reasonably accurate medical description, but hardly that which

From the Department of Psychiatry & Neurology, Tulane University, School of Medicine, 1430 Tulane Avenue, New Orleans, Louisiana.

a physician would prefer to happen, or recommend as therapeutic to a patient. The word "shock" does not seemingly describe any aspect of the psychiatric treatment and would appear to be a psychologically, physiologically, and semantically inaccurate designation. In support of this premise, the following data is presented:

Method

A questionnaire was designed to answer the specific question posed by the principal investigator. "Are there measurable differences in the anxiety stimulus value of different verbal descriptions of the same therapeutic techniques, particularly Electric Shock vs. Electric Stimulation? If such differences can be demonstrated, how do they compare with differences in anxiety stimulus values associated with other therapeutic techniques?" Secondary questions also considered were: "What is the relationship—if any—between anxiety values and the degree of personal reference made by the respondent?" Finally, "Are the observed differences —if any—related to the level of sophistication of the language used to describe the therapy?"

In order to provide for an adequate range of response, twelve types of therapy, deemed to be familiar to the typical patient, were selected.

Insulin shock therapy
Insulin injections
Psychiatric treatment
An operation for appendicitis
An operation for tonsils
Electrical shock treatment
Electrical stimulation treatment
Amputation of a hand or foot
Hormone injections
Being fed through a stomach tube
Radium or X-ray treatments
An operation for gallstones

TABLE I

Mean Anxiety Values Assigned to 12 Therapy Terms by 90 Subjects

		PART I							PART II
		Frame of Reference N=90			Vocabulary Level N=90			Total	
		I	II	III	A	B	C	N=270	N=90
Amputation of a hand or foot	M	4.47	4.57	1.63	3.76	3.80	3.11	3.55	9.91
	S.D.	1.07	.91	.90	1.61	1.67	1.62	1.68	1.64
Electric shock treatment	M	4.11	4.25	2.67	3.66	3.75	3.62	3.68	8.42
	S.D.	1.18	.81	1.27	1.24	1.34	1.35	1.32	1.90
Radium or X-ray treatment	M	3.67	3.80	1.80	2.89	3.31	3.03	3.10	7.87
	S.D.	1.40	1.21	1.17	1.54	1.57	1.53	1.55	3.29
Insulin shock treatment	M	3.82	3.80	2.31	3.37	3.24	3.31	3.31	7.30
	S.D.	1.25	1.17	1.22	1.23	1.45	1.47	1.40	2.02
An operation for gallstones	M	3.15	3.39	1.33	2.40	2.79	2.69	2.65	5.77
	S.D.	1.13	1.01	.64	1.17	1.43	1.33	1.33	2.23
Electrical stimulation treatment	M	3.03	3.27	2.20	2.75	3.21	2.54	2.83	5.50
	S.D.	1.73	1.26	1.12	1.21	1.38	1.69	1.47	2.14
Being fed through a stomach tube	M	3.29	3.44	1.72	2.72	2.97	2.75	2.81	5.27
	S.D.	1.36	1.20	1.02	1.39	1.53	1.35	1.43	2.28
Psychiatric treatment	M	3.23	3.26	2.52	3.02	3.21	2.79	3.00	4.84
	S.D.	1.37	1.31	1.24	1.30	1.35	1.35	1.35	2.62
Insulin injections	M	2.75	2.73	1.58	2.28	2.69	2.10	2.35	3.99
	S.D.	1.25	1.40	.92	1.24	1.36	1.36	1.32	2.08
An operation for appendicitis	M	2.03	2.01	1.21	1.72	1.89	1.64	1.75	3.23
	S.D.	.90	.92	.83	.75	.99	1.10	.96	2.11
Hormone injections	M	2.08	2.06	1.99	1.86	2.25	2.01	2.04	2.04
	S.D.	1.20	1.19	1.22	1.05	1.24	1.28	1.20	2.07
An operation for tonsils	M	1.65	1.78	1.08	1.53	1.53	1.44	1.50	1.87
	S.D.	.86	.89	.27	.81	.82	.75	.79	2.17
Correlation, rank of mean values with mean values, Part II		.94	97	.44	.89	95	.90	.92	

Three degrees of personal reference were selected, and defined as:

I—Oriented toward the respondent himself, in conversation with his physician;

II—Oriented toward a member of the respondent's family, in conversation with the physician; and

III—Oriented to a member of the respondent's family, in conversation with a friend or an acquaintance.

All items were described in three levels of language, from exceedingly simple to medical (sounding) terminology. In the subsequent discussion, these are referred to as:

LEVEL A—Relatively informed, as used by educated people in their conversation with each other, in medical reporting in the popular magazines, etc.

As "An operation for appendicitis."

LEVEL B—Professionally trained as might be used by physicians in talking with some sophisticated person, nurses, etc.

As "Appendectomy."

LEVEL C—Relatively naive, as would be used by people who have less than a college education, have little contact with members of the medical profession, etc.

As "Having the appendix taken out."

The "anxiety value" was quantified on a five point scale, degrees of which were described as follows:

Frames of Reference
I & II

1. I would not be very concerned.
2. I'd be somewhat uneasy.
3. I would be rather concerned.
4. I'd be somewhat worried.
5. I would be quite upset.

Frame of Reference
III

1. I would not mind telling him.
2. I would tell him something about it.
3. I'd be vague and tell him as little as I could.
4. I would tell him only if he insisted.
5. I would refuse to talk to him about it at all.

(This arbitrary scaling of items has been demonstrated as equivalent to more elaborate procedures used in research on attitudes when the number of items or areas to be considered exceeds ten[4] as it does in this case.)

In Part I, the 12 critical items were intermingled with a variety of other medical terms—eight different terms for each frame of reference, to relieve monotony.

Three forms of questionnaire were set up so that the influence of language level and frame of reference could be balanced out and/or examined separately. The composition of each form is listed below, the Roman numeral showing the frame of reference and the letter designating the language level.

Form I	I-A, II-B, III-C
Form II	I-B, II-C, III-A
Form III	I-C, II-A, III-B

As a control against the point scale arbitrarily setup to define relative degrees of anxiety, a Part II was added to each questionnaire. Here the twelve terms in Frame of Reference II and Vocabulary level A were presented in a standard Paired Comparison design. In this design, each item is paired with every other one—60 pairs in all—and the respondent was asked to indicate which one of each pair he "would mind more." In this case, the anxiety level of each term is indicated by the number of "votes" each term receives. The total possible range is 12 points, rather than 5 points, as in Part I. This method has been effective in quantifying degrees of feeling, affect value, opinion or judgment in a variety of situations.[5,6,7]

Each form of the questionnaire was completed by 30 individuals, making a total of 90 subjects, all of whom were residents of a typical middle class subdivision of New Orleans. The introductory section stated that the School of Medicine of Tulane University was conducting a survey on communication between physician and patient, and between physician and members of the patient's family. The principal investigator called at the home of each respondent, explained the purpose of the study, and upon receiving a promise of cooperation, left the questionnaire. He later called for the completed forms. (In general, the 95% rate of compliance was remarkably higher than is usual found in market research surveys, where the acceptance rate is about 8% for interviews, long questionnaires or other time consuming procedures. Apparently the prestige attached to medical research was in part responsible.)

The sample appears to be fairly representative of a private patient population. Of the 90 subjects, 44 were male and 46 female. Nearly all of them—87—were married. A majority, or 50, were between 21 and 30 years old; 3 were 20 or younger; 29 were between 31 and 40; 4 were between 41 and 50; and 4 were 51 or older. Not all of the subjects answered the question on education, but 2 indicated they had completed grammar school, 31 stated they had completed high school and 36 reported themselves as college graduates. Most of the women reported their occupation as housewife. The men reported "sales," "business man" or one of the professions as their occupation.

Results

Part I of the questionnaire was scored by a tabulation of the anxiety values assigned to each of the critical items. Table I gives the mean or average anxiety values for each of the items for the 90 subjects (270 replies per item), the mean values (based on 90 replies per item) for each vocabulary level and for each frame of reference. It will be noted that there is a gradual decrease in the mean values from the high value of 3.68 assigned to *Electrical Shock Treatment* to the low value of 1.50 assigned to *An Operation for Tonsils.* Figure 1 shows the mean anxiety values for all items on Part 1.

An inspection of the table also shows that there is general agreement on the higher values assigned in Frame of Reference I and II than those in Frame of Reference III. Nearly all values assigned in Frame III are lower, apparently because the setting for communication is social, rather than a direct physician-patient communication. It will also be noted that there is a change in relative order of the values assigned, marked primarily by a change in *Psychiatry* from a rank of 8 to a rank of 2. *Insulin Shock* and *Electrical Stimulation,* both terms which may be associated with the treatment of mental rather than physical illness—at least by the more sophisticated subjects—also move nearer to the top of the list, suggesting that a social stigma value may have influenced the values in Frame III. Differences in vocabulary level had little influence on the anxiety scores as can be seen from the table.

Figure 1 shows the significance of the difference between the mean anxiety scores obtained for each item in Part I, based on 270 responses per item. While there is relatively little difference between the anxiety values of items ranked next to each other, particularly in the lower end of the scale, a difference of two ranks yields a highly significant difference—at least from the statistical point of view. Over-all, of the 66 comparisons made in the table, 57 exceed the accepted standard, with odds of 99:1, that the difference is not due to chance alone.

Scores for Part II were obtained by counting the number of preferences or "votes" for each item as it appeared 11 times, paired with every other item. (The range of possible scores per item was 0-11.) The mean number of votes per item was calculated, and these are shown in the column at the extreme right in Table I. Figure 2 shows the significance level of the differences between these mean values (or the odds that the obtained differences are due to something other than chance). Because both the Frame of Reference and Vocabulary Level are held constant in Part II, there is somewhat more uniformity in the replies. Again, however, the order of anxiety level is similar to the order obtained for Part I. The only noteworthy difference is found in the fact that *Amputation* here has the highest rank. This seems to be due to the fact that it has such a lower rank for Frame III, tending to depress the values for the totals in Part I.

The function of Part II as a control is indicated by the degree of agreement between the relative order of anxiety values assigned in Parts I and II, as measured by the correlation coefficients shown on the last line of Table I. (A correlation coefficient of 1.00 indicates perfect agreement, while one of .00 indicates no agreement.) The relative order of anxiety values assigned to the 12 therapy terms remains similar for Frames of Reference I and II and in all three Vocabulary Levels. A change in order for Frame III, noted above, is substantiated by

Note: The height of the bar indicates the mean anxiety value of each item as labeled. To find the significance of the difference between mean values of any pair of items, follow the bar for the first one toward the base line. The shading at the point where the horizontal line from the top of the bar from the second item crosses it shows the significance of the difference, e.g. EST is higher than Electrical Stimulation Treatment at a significance level over 100,000:1.

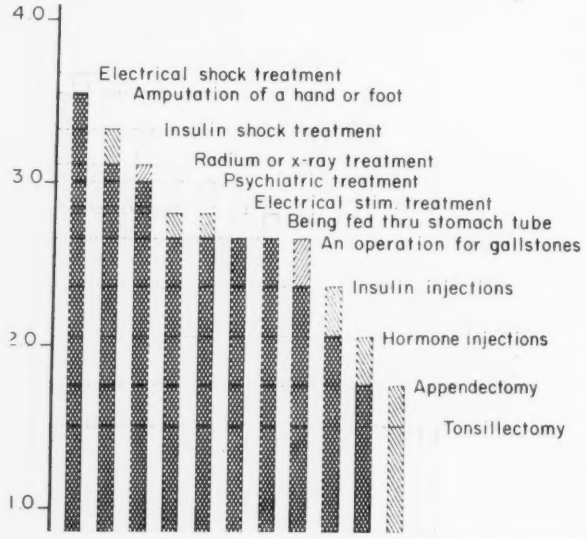


Fig. 1. Mean anxiety values of 12 therapy terms, and significance of differences between mean values. Part I (N=270).

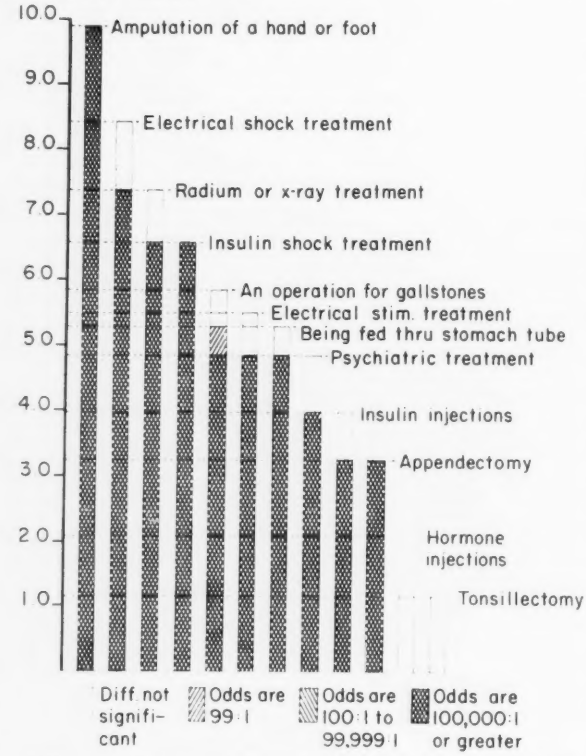


Fig. 2. Mean anxiety values of 12 therapy terms, and significance of differences between mean values. Part II (N=90).

the relatively lower correlation of anxiety values here when compared with Part II.

The data emphasize that different descriptive terms for the same type of therapy do evoke different degrees of anxiety. These differences in degrees, as well as the relative degree of anxiety expressed for each of 12 therapy terms, remained the constant for two types of personal reference, for three levels of vocabulary, and when measured by two different techniques.

Conclusions

It is concluded from this study that the term "Electric shock treatment" when considered with 11 other medical terms, by a typical, middle class, New Orleans, suburban population, evoked more responses related to greater anxiety than all but 2 of the 12 terms considered. More specifically the word "shock" is incriminated as the major contributor to this high anxiety response. This study seems therefore to support the premise that the word "shock" initiates a marked anxiety response in the given context. It additionally supports the concept that the term Electric Shock Therapy is a non-scientific absurdity, the use of which contributes to erroneous belief, inappropriate anxiety, and re-inforcement of concepts prejudicial to a better understanding of mental illness and psychiatry in general.

Misconceptions are not easily erased, but medical responsibility embraces an educative function; thus it is corollary that the physician educates as well as treats. Realistically were every physician to cease using the words "Electric shock therapy" and replace them with "electrotonic therapy" (a term suggested by Robie),[8] or "stimulation therapy," the anxiety already generated would not immediately subside. But in much the same manner as the dreaded "leprosy" was successfully replaced by an innocuous "Hansen's Disease," so should the fear engendering concept "Shock Therapy" be erased and a more psychologically correct, and physiologically appropriate symbol, established in its place. Third symbol should accurately reflect the nature of the procedure and the objective of the profession.

Summary

1. Attention is called to the indiscriminate usage of the word "shock" by physicians. This word with reference to certain physical treatments by psychiatrists not only violates psychological principle but is descriptively inaccurate.

2. Results of a survey of a suburban population are included which indicate that two medical terms which include the word "shock" show consistently higher anxiety responses than all but two of the other medical terms with which they were compared.

3. It is suggested that substitution of a scientifically accurate term for the psychologically destructive one will result in a reduction of anticipatory anxiety for the patient and encourage a better understanding of one of the forms of treatment of the emotionally disturbed.

E. C. Miller, Dept. of Psych. & Neurol., Tulane University School of Medicine, 1430 Tulane Ave., New Orleans, La.

Martha Kelly, Manager, Richardsen, Bellows, Henry & Co., New Orleans, La.

BIBLIOGRAPHY

1. Deshaies, G., and Pellier, S.: Les accidents de l'electrochoctherapie. *Ann. méd.-psychol.,* 108: 606-626, 1950.
2. Walpole, Hugh R.: "Semantics." New York: *W. W. Norton & Co.,* 1941.
3. Meerloo, A. M.: *J. Nerv. & Ment. Dis.,* III: 490, Jan.-June, 1950.
4. Likert, R.: A Technique for the Measurement of Attitudes. *Arch. of Psychology,* 1932, No. 140, 55 pp.
5. Lawske, C. H., Jr., Kephart, N. C., and McCormick, E. J.: The Paired Comparison Technique for Rating Performance of Industrial Employees. *J. of Applied Psychology,* 1949, 33: 69-77.
6. Guilford, J. P.: "Psychometric Methods." *McGraw-Hill,* 1936, Ch. VII, p. 217-240.
7. Kelly, M. L.: A Study of Industrial Inspection by the Method of Paired Comparisons. *Psychological Monographs,* 1955, 69 (9), No. 394, 16 pp.
8. Robie, T. R.: *Am. J. Psychiat.,* 106: 902, 1950.

Chemotherapeutic Trials in Psychosis. IV:

(Report on a Test for Potentiation of Rauwolfia in Chronic Schizophrenics by High Dosage of Vitamins)

WM. J. TURNER, M.D., VICTORIA HANIA, M.D., SEYMOUR HALPERN, PH.D., and SIDNEY MERLIS, M.D.

The original enthusiastic reports concerning the effectiveness of Rauwolfia compounds in the treatment of acute and chronic schizophrenics have not been substantiated by later work. Indeed, the use of Rauwolfia preparations in New York state hospitals is progressively decreasing. There is enough evidence of a physiological and pharmacological action of Rauwolfia on behavior to suggest that some still unrecognized additional factor was present in the conditions under which the original work was done to warrant a review of this subject when new approaches are offered.

In 1959, at the 135th meeting of the American Chemical Society, Salvador Burton and his associates[1] reported that, following the administration of nicotinamide to mice, a large increase in the level of diphosphopyridine nucleotide (DNP) occurred in the liver. This increase reached its maximum in eight to 12 hours and returned to th former levels in 24 hours. When reserpine was administered four hours prior to nicotinamide, the return of DNP to the former level took 36 to 48 hours. Deserpidine had the same action as reserpine. It seemed possible that the originally reported effects of reserpine might have been due to a persistently high level of DNP in the tissues of schizophrenics. Furthermore, it might even be possible that the reserpine had decreased the destruction of those enzymes derived from phosphorylation of other members of Vitamin B group. A regimen which combined reserpine with high doses of Vitamin B complex might be of therapeutic value in chronic schizophrenia. Accordingly, a pilot study was instituted.

From Research Division, Central Islip State Hospital, Central Islip, N. Y.

Subjects:

Ten subjects (5 male and 5 female) were chosen who had previously participated in a Rauwolfia trial reported in 1958.[2] Three of these patients have since been on the wards of the Research Division, where we have had the opportunity not only to evaluate their responses to other medications but also to observe them in a therapeutic milieu which permits almost daily contacts. The other seven patients were distributed through four other wards of the hospital. All were chronic schizophrenics between the ages of 30 and 46, with no known physical illness or brain damage. None received any shock treatment within the previous year. Three patients had recently been on large doses of chlorpromazine, the effect of which had been merely to decrease their motor activity.

Medication:

Medication was supplied as the cherry-flavored syrup which was employed in our 1956 study.[2] Chromatogram of the preparation revealed that it had not changed from its 1956 composition and that no destruction of the reserpine or raunormine (deserpine) had occurred. The reserpine and raunormine were given interchangeably at a dosage of 5.8 mg. per day. In addition, each patient received a very high potency vitamin preparation, one capsule thrice daily.

Conduct of the Trial:

Subjects were interviewed by at least three members of our staff prior to the initiation of the trial. Lorr Rating Scales[3] were completed on each patient on the basis of an interview which lasted at least one-half hour. There were a minimum of two interviews with each patient. Medication was administered three times a day for 40 days. The patients were re-tested at the end of two weeks and at the conclusion of the trial, just before medication was discontinued.

Results

The patients generally expressed a favorable opinion of the trial. It turned out that they felt they were able to sleep better and also they felt that a favorable comment to the doctor was desired. Actually, only one patient had done something out of the usual routine during the medication period; he began to insist that he be called by his name rather than by the color of his hair. At the final interview he was pleased (and his pleasure shone through his shyness) that others responded agreeably to this desire. One woman patient began to show a maternal interest in two catatonics during this period. This patient, when given any medication, becomes depressed and mutters: "Mr. ——— should be in here. He should have to take this." This refers to her stepfather, whose drunken brutality and sexual activity in her presence led to her hospitalization at the age of 14. We knew that this patient in her greatest periods of depression during the past twenty years had used this way of maintaining contact and attempting a resolution of her difficulties. Her altruism was as if to say: "Do unto me as I have done unto the least of these." Instead of a sign of improvement, then, this was an indication that she felt more despairing. Regarding this and other patients, the ward personnel generally reported no improvement, as is shown in the data obtained from the second section of the Lorr Rating Scale in Table I.

Examination of the Lorr Rating Scale data was attempted in several ways. Without going into full detail, it can be said that on mere inspection it was evident that there was no significant alteration in any patient, much less in any group of patients, during the trial period. One way of scoring the data was as follows: Each item was scored from 0 to 4 on the basis of the difference between the given rating and the rating of a hypothetical normal, as described in the manual of the Lorr Scale. The ratings before the trial and at the completion of the trial were compared and movements toward the normal were given a positive integer, while movements away from the norm were given a negative integer, as shown in Table I.

When we consider patients 2, 4, 5 and 10 as showing marked improvement in their interviews, we see that this improvement is substantiated by ward observations only in

TABLE I

Movements on Lorr Rating Scale During Trial of Rauwolfia and Vitamins

Patient	*Half-hour Interview*		*Ward Observations*	
No.	+	—	+	—
1	9	14	6	8
2	25	3	6	0
3	9	14	6	8
4	15	0	3	9
5	10	0	5	4
6	3	9	0	5
7	2	12	4	6
8	6	3	10	1
9	19	15	4	6
10	9	1	1	6

the instance of patient 2 (q.v.). This patient improved in 12 of the 40 items in the interview part of the scale and became worse in three. She improved in four of the ward observation items and became worse in none. The items in which she became worse during the interview concerned orientation for people and place; she also became more depressed. Patient 5 had many unratable items, both before and after the trial. A comment made by one of the examiners on a second interview chanced to elicit briefly a positive response and it was on the basis of this that the apparent improvement was reported.

When we consider the total number of items on the interview section of the test (40 each or 400 items for 10 patients), only 61 items showed a movement toward improvement, while 52 showed movement away from the normal, leaving a total of 287 items unchanged. On the ward observation items (23 each or a total of 230) there was a total of 37 movements toward and 44 away from the normal, leaving a total of 149 items which showed no change; there was no one item which greatly and consistently showed improvement. One item, a decrease in hostility (#16 in the interview section of the test) showed a marked improvement in more than half of the patients.

Dr. Wm. F. Kwolek, statistician at Lederle Laboratories, examined the data further. He assigned scores according to the Lorr procedure for each of the 11 factors of the Lorr Scale and subjected them to rank test, as described by Wilcoxon.[4] In only one instance was there a significant change in the ratings from pre- to post-medication. This instance was Factor E, melancholy agitation. It should be noted that statisticians have already pointed out that, if the 5% level of significance is adopted, one out of twenty random elements will prove to be significant. The assumption is, in our clinical studies, that the apparently significant change in Factor E would not be substantiated in parallel studies.

We are led to conclude that the combination of reserpine and vitamins, when administered under the conditions employed, has no clear-cut therapeutic value in chronic schizophrenia.

Summary

Reserpine, or, alternately, raunormine, was administered to chronic schizophrenic patients, 5 men and 5 women, at a dosage level of 5.8 mg. a day for 40 days. A large dose of vitamin B complex was added to the regimen. This combination exhibited no therapeutic value.

Authors' Note: We are indebted to Lederle Laboratories for generous supplies of reserpine, raunormine and Stresscaps. The composition of Lederle Stresscaps, according to the manufacturer, is: thiamine mononitrate 10 mg.; riboflavin 10 mg.; niacinamide 100 mg.; ascorbic acid 300 mg.; pyridoxine HCl 2 mg.; vitamin B_{12} 4 mcgm.; folic acid 1.5 mg.; calcium pantothenate 20 mg.; vitamin K (menadione) 2 mg.

REFERENCES

1. Salvador, R., Burton, R. M., Kaplan, N. O., Goldin, A., and Leitenberg, M.: Effects of Reserpine and Chlorpromazine on Pyridine Nucleotide Synthesis. Presented at 135th Meeting of A.C.S., Boston, 1959.
2. Turner, W. J., Carl, A., Merlis, S., and Wilcoxon, F.: *Arch. Neurol. & Psychiat.*, 79:597-602, 1958.
3. Lorr, M.: *1. Hospital Form, V. A. Tech. Bull.*, 10-507, 1953.
4. Wilcoxon, F.: Some Rapid Approximate Statistical Procedures, Stamford, Conn., Amer. Cyanamid Co., 1949.

De-Institutionalization of Patients

(The Triad of Trifluoperazine - Group Psychotherapy - Adjunctive Therapy)

M. G. EVANGELAKIS, M.D.

While attention in the literature has been focused upon the merits of psychopharmacological compounds *per se*, insufficient consideration has been given the emotional and environmental factors which play an important role in determining the success of pharmacotherapy. If, as has been suggested, phrenotropic drugs are most effective in association with other modes of therapy, then it would appear that the events preceding and coinciding with a drug therapy program play an important role in the patients' improvement.

This clinical trial of trifluoperazine (Stelazine) was designed to clarify the role of adjunctive and group psychotherapy in addition to treatment with a phrenotropic drug. Our intention was to compare drug therapy alone with various combination modes of therapy.

Material and Method

One hundred hospitalized women patients were selected for this study on the basis of chronicity and failure to benefit from previous treatment. These patients were divided into five groups of 20 patients. An attempt was made to match the patients in these groups on the following variables[1]: potential prognostic significance: age, years of education, marital status, level of prehospitalization achievement, age at first hospitalization, diagnosis, number of years hospitalized, intelligence, severity of present illness, physical condition, amount of individual and group psychotherapy received. After the five experimental groups had been established, analysis of the distributions of each of these variables revealed that individual matching had successfully been accomplished in terms of pre-established limits on 10 of the 12 variables. Matching failed only in 8 at first hospitalization and amount of individual and group psychotherapy received. The patients were interviewed in an informal way once or twice weekly during this time.

Ages ranged from 25 to 67 years (average age, 46); 47 patients were 50 years old or over. Formal education varied from 2 to 15 years (average 10 years); 35% were not and had never been married. Fifteen patients had been hospitalized for two years and the others had been continuously hospitalized for 3 to 39 years (average 19 years). Table I.) The duration of illness ranged from 4 to 39 years; 42 patients had received at least two full years psychopharmacotherapy with slight or no improvement.

TABLE I

Pts. Age	No. Pts.	Admission Year	No. Pts.
25–35	21	1925–1935	14
35–45	21	1935–1945	41
45–55	30	1945–1955	26
55–65	18	1955–1960	19
65 and over	10		
Total	100	Total	100

Thorough physical examination prior to institution of trifluoperazine showed all patients to be in satisfactory physical health except five whose blood pressure was slightly elevated. In all patients the prognosis, because of the chronic nature of their illness and the lack of response to previous treatment, was considered as poor. Among the clinical syndromes, categorized according to the classification manual of the American Psychiatric Association, were these (Table II):

As can be seen, the majority of these cases fell into the group of schizophrenias, the remainder consisting of various diagnostic categories.

Prior to the start of the study a record was kept of the patient's behavior. Eleven patients were in constant seclusion because of episodes of impulsive violence, destructiveness and denudativeness. Others were

Psychiatric Section Chief, Larned State Hospital and Fellow of the Menninger School of Psychiatry, Topeka, Kansas.

TABLE II

Diagnosis	*No. Pts.*
Schizophrenic reaction, simple type	7
Schizophrenic reaction, hebephrenic type	9
Schizophrenic reaction, catatonic type	10
Schizophrenic reaction, paranoid type	32
Schizophrenic reaction, undifferentiated type, chronic	25
Manic-depressive reaction, manic type	4
Manic-depressive reaction, depressed type	2
Involutional psychotic reaction	1
Psychoneurotic disorder, depressive reaction	2
Chronic brain syndrome assoc. with convulsive disorder (Grand mal epilepsy) with psychotic reaction	2
Mental deficiency, mild, with psychotic reaction	2
Mental deficiency, moderate, with psychotic reaction	4
Total	100

actively hallucinating and delusional. In some auditory hallucinations were a conspicuous symptom. Some were tense, mildly agitated, irritable, hostile, and a few were lethargic from chlorpromazine and reserpine. The majority were withdrawn, apathetic, preoccupied, disinterested, listless, unambitious, flat in affect, negativistic, incontinent of urine and often of feces. Some were stool smearers. They were frequently nude and subject to periods of excitement. Ten of the severely regressed were mute. All had remained refractory to any type of treatment and their condition had remained unchanged or had deteriorated during the last three to 15 years. Most lacked enough initiative on the ward and in adjunctive therapy assignments to be considered for transfer to an open ward.

In order to evaluate quantitatively the differences between treatment with drug alone and treatment with other forms of therapy, we divided the groups as follows:

GROUP A: *Non-drug Group.* These patients received a placebo instead of trifluoperazine but participated in both ward group sessions and inward and off-ward adjunctive therapies.

GROUP B: *Drug Only.* These received trifluoperazine but were exposed to no other change in their ward routine.

GROUP C: *Drug Plus In-Ward Adjunctive Therapy.* These were given the drug and participated in in-ward adjunctive therapy.

GROUP D: *Drug Plus Off-Ward Adjunctive Therapy.* These patients received drug treatment and off-ward adjunctive therapies but no ward group sessions.

GROUP E: *Drug, In-Ward and Off-Ward Adjunctive Therapy, Group Sessions.* This group received the complete range of therapy.

The treatment plan centered around a threefold approach: physical (the drug), emotional (ward group sessions) and environmental (Adjunctive Therapy). We concentrated on a program designed to awaken interest and to make the patient realize that his illness could be treated. All drugs were discontinued other than those being administered for organic diseases.

The 8 to 10 most disturbed patients in each group (except Group A) were started on trifluoperazine, 2 mg. intramuscularly b.i.d., and within two days the dosage was increased to t.i.d. for the next six days. The

TABLE III

Diagnostic Composition of Groups

Diagnosis	**Group A** Non-Drug In-Ward. Off-Ward A.T.	**Group B** Drug Alone	**Group C** Drug In-Ward A.T.	**Group D** Drug Off-Ward A.T.	**Group E** Drug Ward Session In-Ward Off-Ward A.T.	No. Pts.
Schiz. r., simple type	2	1	1	2	1	7
Schiz. r., hebephr. type	2	2	1	2	2	9
Schiz. r., cataton. type	2	2	2	2	2	10
Schiz. r., paranoid type	6	7	7	7	5	32
Schiz. r., undiffer. type, chronic	5	6	6	5	3	25
Manic-depressive r. manic type	1	1	1		1	4
Manic-depressive r. depr. type		1			1	2
Involutional psych. reaction					1	1
Psychoneurotic disorder, depressive reaction				1	1	2
C.B.S. assoc. with convulsive disorder (GM epilepsy) with psychotic reaction	1				1	2
Mental def. mild, with psych. r.			1		1	2
Mental def. moderate with psychotic reaction	1		1	1	1	4
Totals	20	20	20	20	20	100

A.T.—adjunctive therapy.

dose was then increased to 4 mg. twice daily, i.m., during the second week. By this time, it was possible to place patients on oral medication, which was increased gradually for the following five weeks up to 10 mg. three times daily. If this amount did not give the desired effect, the dosage was increased by as much as 50 mg. daily. Patients continued to receive the higher dose for approximately one month, after which doses were gradually decreased by 5 mg. each week to a maintenance level of 5 mg. twice or three times daily.

Those patients who were less disturbed and most of the time withdrawn and disinterested were started on a dosage of one 2 mg. tablet twice daily which was increased and then decreased according to the routine described above. The highest dosage given orally was 40 mg. daily.

Prior to the beginning of the study, all the patients had blood, urine, and liver function studies. These were repeated weekly for the first four weeks of treatment and later every month and at the end of the study.

Duration of treatment in the groups as a whole ranged from four to eighteen months.

In order to establish better rapport with the patient and to use the hospital atmosphere to full advantage, we started twice weekly ward group sessions with the Group A and Group E, separately. Patients were invited to attend group sessions after the evaluation of their record and the establishment of a goal for them. The patient first was interviewed individually to explain the purpose of the session and whenever possible to gain her agreement to attend. This proved to be very useful, since not more than 20% of the patients of the two Groups stopped attending the sessions.

All the patients lived together on a single ward. They were kept under constant observation during the period of therapy. Their relative homogeneity within each group made it possible to prescribe with a few exceptions the same occupational, industrial and recreational activities. As mentioned, since the criterion of therapeutic effectiveness was modification of general ward behavior, it was necessary to determine the degree of similarity displayed by the five treatment groups just prior to the initiation of the whole program. An analysis of the initial ward behavior ratings for the five groups revealed no statistically significant difference and suggested that there were no marked differences in degree of disturbance among the five groups.

As soon as contact was established, the patients were given the opportunity and encouragement to participate in adjunctive therapies and other social activities. They were encouraged to dress up, visit the beauty parlor and visit the recreation department where they were permitted to socialize with male patients. All patients, except the ones in Group B (Drug Alone Group), were exposed to an intensive program of rehabilitation activities for a period of 18 months. This program included musical, recreational, occupational, industrial, educational therapy, vocational guidance, and psychiatric social service. The Adjunctive Therapy Department initially assigned two full time activity therapists to the project. As the program grew and the needs increased another therapist was assigned on a part time basis. Classes were aimed toward the three goals of the project: remotivation, resocialization and return to the community. The various adjunctive therapies and the number of patients attending are listed in Table 4.

Results

This study, which was started in January, 1959, and was carried out over 18 months, shows the following results.

Of the original 100 patients, 24 showed excellent response; 13 have been discharged and 11 placed on convalescent status (trial visit) in the community. Reports from relatives indicate that they are outgoing and communicative and try to help out at home to the best of their abilities. Six of the 11 on convalescent status are being carried on an extended convalescent status at their request rather than being discharged. All these 24 patients came from the Group E (9), D (10), and C (5). Good response was seen in 29 patients and were placed in boarding homes. We are informed that 11 of these

patients are now employed. The nursing home placement system as part of the Social Service Program has not only resulted in the release of many patients from the hospital but has also done much to overcome the prevalent concept that the institutionalized patient will remain in the hospital for the rest of his life.

Of the remaining 47 patients, 21 have made various degrees of improvement, sufficient to permit ground privileges and transfer to an open ward. This group included many patients who had previously spent their time idly on the ward. They are now assigned to various work details where they function adequately. A few in this group will very soon be considered for ground privileges and temporary leaves of absence in view of their present satisfactory ward adjustment. The remaining 26 patients failed to improve enough to justify being placed on a convalescent status in the community or transferred to an open ward; 12 of them dropped out during the first few weeks and none of these made a satisfactory adjustment in the hospital. These patients showed little symptomatic improvement and have not been given ground privileges as yet. However, they do show some signs of improvement in sleeping and eating patterns

TABLE IV

Adjunctive Therapies

MUSIC

	GROUP A		GROUP B	GROUP C		GROUP D		GROUP E			
Department	No. Pts.	Weekly Contacts		No. Pts.	Weekly Contacts	No. Pts.	Weekly Contacts	No. Pts.	Weekly Contacts	Average Attending	Weekly Contacts
Ward Music	20	2	—	20	2	—		20	2	60	120
Dance Group	—		—	—		—		20	1	18	18
Choir	—		—	—		—		2	3	2	6
Night Activities	20	2	—	—		20	2	20	2	53	106
RECREATION											
Group Games	20	3	—	20	3	—		20	3	61	183
Clinic Games	20	5	—	—		20	5	20	5	55	275
Ward Movies	20	1	—	20	1	—		20	1	50	50
Bus Trips	20	1	—	—		20	1	20	1	35	35
Night Activities	20	4	—	—		20	4	20	4	55	220
OCCUPATIONAL											
Ward Shop (10 months)	20	5	—	20	5	—		20	5	35	175
Ward Shop (8 months)	20	5	—	20	5	—		20	5	60	300
Clinic O.T.	20	5	—	—		—		20	5	5	25
INDUSTRIAL											
Beauty Shop	1	5	—	—		1	5	2	5	3	15
Canteen	—		—	—		1	5	—		1	5
Cafeteria	1	5	—	—		1	5	1	5	2	10
Green House	—		—	—		—		1	5	1	5
Geriatrics	2	5	—	—		1	5	2	5	3	15
M & S	—		—	—		2	5	2	5	2	10
Housekeeping	1	5	—	—		1	5	1	5	3	15
Cleaning Home Ward	2	5	—	7	5	—		3	5	8	40
Vegetable R.	1	5	—	—		2	5	—		3	15
BIBLIOTHERAPY											
Library	4	1	—	—		4	1	3	1	9	9
Reading Group	7	1	—	7	1	—		6	1	18	18
Volunteer Service	3	1	—	1	1	—		7	1	10	10
										TOTAL	1691

and some are paying more attention to their appearance. They require much less care and supervision than formerly. Extended treatment may well bring further improvement. In general, we noted that the Groups D, E, and in a lesser degree, Group C, showed better results. In Group B (Drug Alone Group) we noted good response in only nine patients, while in the Group A (Placebo Treated), there were no good results.

TABLE V

	Excellent			Good	Fair		
Group	Disch.	Trial Visit	Boarding Homes	Ward Transfer	Unaffected	Worse	Total
A	–	–	–	3	14	4	20
B	–	–	9	6	–	5	20
C	1	4	4	9	–	2	20
D	6	4	7	3	–	–	20
E	6	3	9	–	–	2	20
Total	13	11	29	21	14	12	100

As can be seen, the best results were achieved with a combination of trifluoperazine, ward group sessions and intensive adjunctive therapy.

Immediate improvement was noted in less than 48 hours in nearly all of these patients, especially in those with agitation. The cessation of their aggressiveness was most striking and this improvement has been maintained since the termination of treatment. As trifluoperazine, ward group sessions and adjunctive therapy were continued there was dramatic reduction of abnormal activity in all. Eleven unruly patients were released from seclusion within 72 hours and have not been put back. At the beginning of the therapy we noted that several actively hallucinating and delusional patients became free of their hallucinations and delusions but these later relapsed. At the end of the treatment almost all of the hallucinating and delusional patients still experienced delusions and hallucinations but in a lesser degree.

The patients who seemed to respond best were those who were withdrawn, regressed and apathetic. These became more friendly and cooperative and showed renewed interest in general activities. They became more alert, more interested in their environment, more sociable and more active in the hospital programs. Again, the best responses were seen in Groups D and E.

Lethargy and somnolence due to previous chlorpromazine therapy were relieved in 40 of 51 patients. There was no significant gain or loss of weight or anorexia in any of the patients. Instead, appetite seemed to be within normal limits.

Side Effects

The first observed reaction to the drug was somnolence which, however, soon disappeared. After the first few weeks of treatment the most distressing side effect reported by patients was a feeling of inner restlessness, insomnia and weakness of the limbs. This lessened in degree when the dose was reduced to maintenance level.

The most severe side effect of trifluoperazine was noted in six patients, and consisted of a profound asthenia resembling flaccid paralysis which developed and increased rapidly with a dose of 40 to 50 mg. daily. These patients were seriously affected. They became unable to move their lower, and later, their upper extremities, or to raise their head from the bed. Neurological examination revealed at that time no extrapyramidal findings or any signs of peripheral neuropathy or myatrophy. The occurrence of this side effect caused us to abandon the drug for these patients and to replace it later with another. Following cessation of the drug, the patients regained their former ability in working and resumed their limited physical activities. Incidentally, this profound asthenia of such a severe degree has not been mentioned in earlier reports on trifluoperazine. During the administration of 40 mg. daily, four patients complained of "pulling sensation in the legs." They would often pace back and forth and could neither sit still, play, or sleep. This "akathisia" is a manifestation of the parkinsonian syndrome. In our study only one patient was relieved of this side effect within 48 hours after the administration of Cogentin, and discontinu-

ation of the drug. The others continued to manifest this phenomenon for almost 15 days in spite of the administration of Cogentin. As can be seen, akathisia was the least experienced side effect in our study. It was interesting to note that the patients were able to channel their increased energy into productive work and recreational activity. The appearance of varying degrees of extrapyramidal side effects, namely mask-like facies, generalized rigidity, jerky movements of the extremities and head, restlessness and shuffling gait were rare with moderate dosages of trifluoperazine. These were mostly evident when the doses exceeded 25 mg. daily. Those patients who continued to manifest symptoms after reduction of dosage benefited from the concomitant administration of Cogentin in doses of 0.5 mg. three times daily.

It has been suggested[2] that the development of extrapyramidal signs may be considered a physiological indication of full drug effect. In our study, however, none of our most improved patients ever showed marked extrapyramidal signs. In only one case where severe extrapyramidal symptoms persisted was it necessary to discontinue the administration of the drug temporarily. On two occasions one patient complained bitterly of difficulty in swallowing. A few patients complained of blurring in vision when the dosage was 40 mg. daily. No body weight change was noted.

While a mild drop in systolic and diastolic blood pressure (21 patients) was commonly found, nine of the younger patients presented a slight increase of blood pressure. This was not severe enough to confine them to bed or produce complications of hypertension. This hypertension was frequently accompanied with tachycardia. After discontinuation of the drug this side effect disappeared; however, it was not possible to reinstitute the drug in small doses and increase it gradually without the reappearance of these effects. Electrocardiograms done in 25 patients prior to the start of the study and every second month during the treatment period showed no abnormalities.

In one case an aggravation of a pre-existing skin lesion was observed. Two patients mentioned mild generalized itching which subsided quickly with administration of antihistaminic drugs.

All patients were studied for evidence of hepatic or hematologic dysfunction. Before the start of treatment, complete blood counts, cephalin flocculation, alkaline phosphatase and serum bilirubin tests were done, and were repeated weekly at the two first months of treatment and then monthly. None of the patients showed abnormal liver functions in the test while under therapy and no significant change in blood cytology was noted.

Discussion

In general, our findings emphasize the importance of combining intensive group therapy and various adjunctive therapies with drug treatment. Neither Group A, which received a complete range of group and adjunctive therapies but no drug, nor Group B, which received no treatment other than the drug, were as successful as those groups (C, B, and E) which received both types of therapy.

The combination of trifluoperazine-ward group session-adjunctive therapy facilitated more effective use of whatever personal or environmental resources were available to these patients. Further attention by the therapists and researcher to the total psychosociological contacts in which the treatment was administered was clearly necessary. Patients on this regimen became more cooperative and more communicative and interested in in-ward and off-ward routine. It was obvious that the drug facilitated communication during the ward group sessions and in the adjunctive therapies. Patients who went home on leave were reported by their relatives to be alert, friendly and helpful. To appreciate the significance of this progress, it must be remembered that these patients had spent years on closed wards, beyond the reach of any available therapy.

Summary

For the purposes of this study, 100 hospitalized chronic patients were divided into

five different treatment groups. Group A received group and adjunctive therapies but no phrenotropic drugs; Group B received the drug (trifluoperazine) only, but no form of psychotherapy; Group C, D, and E received various combinations of drug, group and adjunctive therapy with Group E receiving the most complete program.

Of those treated, 24 showed an excellent response and were either discharged or permitted to go home on convalescent leave. Especially noteworthy is the fact that all of these 24 came from the group receiving all three types of therapy—trifluoperazine, ward group sessions and adjunctive therapies. There were no excellent responses seen in either Group A (all other therapies except drug) or in Group B (drug only).

The most severe side effect was a profound asthenia resembling flaccid paralysis which occurred in six patients receiving 40 to 50 mg. daily. This reaction disappeared when the drug was discontinued. Other side effects were extrapyramidal in nature and became evident in doses over 25 mg. a day. They were controlled either by reducing dosage or administering Cogentin concomitantly. All patients were studied for evidence of hepatic or hematologic dysfunction at regular intervals throughout this evaluation; no abnormal liver functions or significant change in blood cytology was observed.

Acknowledgment: The author wishes to express his indebtedness to Dr. Naramore, Medical Superintendent of Larned State Hospital, to the nursing staff and adjunctive therapists whose cooperation made this study possible. Special thanks are also due Dr. Paul Feldman, Dr. Welscher, and Dr. Klemmer for their aid in this study, and Smith, Kline and French Laboratories for the supplies of trifluoperazine.

BIBLIOGRAPHY

1. Sherman, L. J.: The Significant Variables in Psychopharmaceutic Research. *Am. J. Psychiat.*, 116: 208-214 (Sept.) 1959.
2. Goldman, D.: Clinical Experience with Trifluoperazine: Treatment of Psychotic States, Trifluoperazine: Clinical and Pharmacological Aspects. Philadelphia: *Lea & Febinger,* 1958, p. 78.

Complications in Trilafon Therapy

HENRY R. OLIVIER, M.D., and MAX SUGAR, M.D.

Generalized convulsions and dystonic seizures, usually involving the head and neck, have been reported with varying frequency as a complication of therapy with some of the phenothiazine drugs.[1,2,3]

The current literature also contains several[4-8] reports of a particular reaction following therapy with perphenazine (Trilafon®). These have appeared with increasing frequency over the past year and appear to constitute a complication of clinical importance. Most of the cases follow a similar pattern in that:

(1) The patient was usually given perphenazine for a non-psychotic condition, e.g., nausea and vomiting of pregnancy.
(2) The total daily dose prescribed was small, usually 8 to 32 mg.
(3) The reactions occurred relatively rapidly following the medication. (In the reports above the symptoms developed in 12 hours to 14 days.)
(4) Characteristically the patient exhibits spasm of the neck and upper spinal muscles with hyperextension and/or rotation of the head and neck; trismus, difficulty in speech and deglutition, oculogyric crises, and clonic movements of the extremities may also be present.

Recently we have observed three additional cases of this "dystonic syndrome" occurring rapidly in patients who received small doses of Trilafon. We have also studied an out-patient who developed a generalized convulsion while receiving small oral doses of perphenazine. The following is a brief presentation of these cases:

Case No. 1—E.V., a 28-year-old white female, was hospitalized on March 7, 1959 for hyperemesis

From the Department of Psychiatry and Neurology, Louisiana State University School of Medicine, New Orleans, La.

gravidarum. On March 7, 1959 at 8:00 P.M. the patient was given 5 mg. of Trilafon intramuscularly for the hyperemesis. On March 8, 1959 at 4:00 A.M. she was given 5 mg. of Trilafon intramuscularly. At 10:00 A.M. she complained of being unable to move (but moved when the nurse told her to) or see. Later she saw double. About 15 minutes later she felt better but her vision was blurred. At 12:00 P.M. she received 5 mg. Trilafon intramuscularly, and at 3:15 P.M. it was noted that her eyes rolled back. She complained of her chest being tight and of "having another spell."

When the patient was seen in consultation about three hours later, she stated that her tongue was thick, her chest tight, and breathing difficult. She also had pain in her muscles, could not move and felt like crying. The patient said that she had also experienced these same peculiar feelings after the two previous injections. However, they had not lasted for any length of time, nor had they been as severe or intense. She had said nothing about this to her attending physician. She was markedly anxious; her affect was appropriate; there were no perceptual or thought disorders noted; her sensorium was clear; there were no hallucinations or delusions elicited. Her muscles were generally hypertonic and rigid, especially in the neck, and she moved her limbs with difficulty. Her face was contorted, and the muscles were drawn to the right side. The tongue was also drawn to the right side and speech was thick. The rest of the neurological examination was normal.

The patient was sedated with gr. IV Sodium Amytal intravenously and slept for about 12 hours. The next day the patient was completely clear of all symptoms and signs of the preceding day.

Case No. 2—H.R., a 48-year-old white male, was given 5 mg. of Trilafon intramuscularly on March 27, 1959, for nausea and vomiting. A similar dose was given on March 29, 1959. About 3½ hours later he was noted to have difficulty in breathing. His nausea and vomiting continued and he became increasingly anxious and restless. On examination he had some rigidity in the neck muscles and he was drooling from the mouth. The nurses on the ward said he had had a "pseudo-convulsion." By this they meant that he had fallen out of bed with his arms and legs shaking. During this episode he had no loss of consciousness, and there were no perceptual, thought or sensorial disorders noted. The patient responded to sedation with sodium luminal gr. II intravenously and all his signs and symptoms cleared. An electroencephalogram could not be obtained.

Case No. 3—B.K., a 56-year-old colored female, attended the surgical clinic following a colostomy for rectal stricture. It was noted that the patient was very "nervous" and on April 24, 1959, Trilafon 4 mg. t.i.d. was prescribed. On April 28, 1959, after approximately 11 oral doses (or 44 mg.), the patient became extremely nervous, "jittery inside." She also felt it necessary to pace the floor. Shortly thereafter, the patient's head drew back into the opisthotonous position, her facial musculature pulled to the right side, and swallowing became difficult.

In the admitting room she received an injection of a barbiturate (dose unknown) and Trilafon was stopped. The symptoms cleared rapidly and there was no residual when seen one week later.

The reported incidence of convulsions in large groups of hospital patients treated with perphenazine has been low, ranging about 1.4% according to Weiss, et al.[9] While these reactions can be well handled in a hospitalized patient, their occurrence in an outpatient may be dangerous.

Case No. 4—Y.M., a 25-year-old colored female, was first seen February 5, 1959 in the emergency room complaining of auditory and visual hallucinations. She had spotty associations, flattened affect, and a history of a similar episode three years before which had remitted spontaneously. She was tentatively diagnosed as schizophrenic reaction, acute paranoid versus dissociated state, and Trilafon 2 mg. q.i.d. was prescribed.

She was next seen February 11, 1959 in the emergency room following a generalized convulsion occurring at home. Her family said that all four extremities had shaken, that she foamed at the mouth and that she was disoriented following this episode. On examination at the hospital, the patient was disoriented, and amnesic for the seizure and the events immediately following it. She complained of hot flashes, auditory hallucinations, right temporal headache and feelings of unreality. Her confusion cleared gradually during the examination and subsequent procedures.

Family and personal history were non-contributory or negative in relation to the seizure. Neurological examination was within normal limits as were a lumbar puncture and a spinal fluid examination. The patient was admitted and maintained on the same dosage of Trilafon to facilitate electroencephalographic studies. This first EEG was performed two days after admission and was reported as "normal waking and sleeping record." The patient did well on the ward and rapidly cleared of her primary and secondary psychotic signs. The patient was discharged one week later without medication. Seven days following the last dose of Trilafon another electroencephalogram was obtained which showed "normal waking and sleeping record."

Discussion

Trilafon is now widely used in all fields of medicine and despite the growing body of evidence in the literature cited above, and

Kinross-Wright's statement[10] that dystonic and spastic episodes are frequent with this drug, we believe that insufficient emphasis has been placed on this particular complication of therapy with Trilafon. This is noted by Shaw,[11] who says that in the cases he observed the physician who prescribed the drug did not anticipate the dystonic reaction and its relationship to Trilafon was not recognized immediately.

It would appear that Trilafon has a cumulative effect. Side reactions occur when a particular level, varying for each patient, is reached. From our data this seems to be hastened by parenteral administration. In our cases, the small total dosage required to produce these reactions and the relatively rapid onset (from 3½ hours to 7 days) suggest that some patients may be highly sensitive to the action of perphenazine. In these cases further treatment should be with another phenothiazine derivative.

The rapid development of dystonic reactions or convulsions, especially following parenteral administration, raises the question of the extensive use of this drug on an out-patient basis. When the drug is given, adequate explanation of all possible side reactions must be given to the patient or his family. Treatment of the dystonic syndrome consists of recognizing the etiology, discontinuing the perphenazine, and sedating with moderate doses of rapidly acting intravenous barbiturates. Where sedative effects are undesirable or unnecessary, intramuscular administration of an antiparkinson drug, such as Kemadrin[R] or Cogentin,[R] will give immediate relief from the symptoms.

Summary

Dystonic muscle spasms, usually involving the head and neck, have been reported with increasing frequency as a complication of therapy with perphenazine (Trilafon). This paper presents three additional cases of this reaction occurring in patients who received small doses of perphenazine, as well as one case of a generalized convulsion in an outpatient receiving a small dose of this drug.

The clinical importance of these reactions is discussed and precautions to be followed are outlined. Suggested treatment for the dystonic seizures is presented.

BIBLIOGRAPHY

1. Hankoff, L. D., et al.: *N. Y. State J. Med.*, 57: 2967, 1957.
2. Szatmari,, A.: *Am. J. Psychiat.*, 112:788 (April) 1956.
3. Martis, J.: *Am. J. Psychiat.*, 115:600 (January) 1959.
4. Berry, R. V., Kamin, Sheldon, H., and Kline, A.: *U.S. Armed Forces M. J.*, 9:745-749 (May) 1958.
5. Shanon, J.: *Dis. Nerv. System*, 20:24-26 (January) 1959.
6. Shaw, E. G.: *Pediatrics*, 22:175-176 (July) 1958.
7. Montgomery, R. D., and Sutherland, V. L.: *Brit. M. J.*, 1:215 (January 24) 1959.
8. Davies, T. S.: *Brit. M. J.*, 1:368 (February 7) 1959.
9. Weiss, I. I., et al.: *J. Clin. Exper. Psychopathol.*, 20:1 (Jan.-Feb.) 1959.
10. Kinross-Wright, V.: in "Psychopharmacology Frontiers," ed. by N. S. Kline, *Boston, Little, Brown*, 1959, p. 66.
11. Shaw, E. G., et al.: *Pediatrics*, 23:485-492 (March) 1959.

Perfectionism and Pseudo-Perfectionism

JEROME M. SCHNECK, M.D.

It is my impression that the characteristics of pseudo-perfectionism can be distinguished from those of perfectionism. Patients demonstrating the features of both are invariably called perfectionistic, yet the descriptive and dynamic components can be separated. There are overlapping elements in clinical settings and it would be fair to state that a continuum exists with perfectionism and pseudo-perfectionism at its poles. Not only can the two categories of functioning be outlined in terms of descriptive and dynamic elements but significant implications are present for therapeutic management. I am inclined to present the basic features of the perfectionist and pseudo-perfectionist as follows.

The perfectionist, in areas of sincere interest, strives for excellence. Usually he succeeds significantly. He is rarely satisfied completely with the final products of his efforts but his appraisal is reasonably realistic. In further efforts he strives for betterment. His work provides satisfactions although he is generally self-critical. The tension of creation diminishes when an item of work is finished and set aside. This tension increases in preparation for and during the next task.

The perfectionist is compulsive in areas of accomplishment. The compulsive components are usually well integrated into total personality functioning. He maintains a fair level of self-esteem and can experience a sense of gratification in the results of his efforts. His desires for the respect of others and for some reward relating to his work are present, but he can postpone the need to reap such returns while putting energy into his endeavors. Satisfaction is derived not only from the merits of the final results but from the process of work itself. The energy and tension outlet of work and resulting pleasure may serve, at times, to compensate for problems and disappointments in other areas. Activities of the perfectionist play an important role in maintaining psychological equilibrium, compensating for feelings of insecurity and holding anxiety in check.

The perfectionist need not be demanding of quality achievement in others if he is operating smoothly. He may place pressure on others at times of special stress when the fluidity of his own efforts is disrupted and when he begins to experience anxiety. He may think of himself as a perfectionist but usually does not mention it spontaneously or frequently. The more secure the perfectionist, the less likely he is to regard his perfectionism as a badge of merit. Although striving constantly toward achievement he has good awareness generally of his abilities and potentialities on a realistic level, and he is also aware of his limitations and shortcomings. Many perfectionists mold such limitations into the total framework of an endeavor.

When the smooth interrelationships of dynamic forces conducive to efficient functioning are disrupted, anxiety or depression or both begin to appear. Obsessive features become more prominent as compulsive defenses decompensate. Feelings of insecurity may be expressed, with loss of self-confidence and decrease in efficiency, wasted effort, and diminished productivity. The fine details of spontaneous reintegration, or mending with therapeutic assistance are superimposed on a basic, compensated personality matrix that had preceded dysfunction. At this time the perfectionist may dwell more on the very presence of his perfectionistic trends and refer to them as such. The prior base of fruitful functioning is a favorable issue in prognosis, but the potential for beneficial change is dependent also on other aspects of psychodynamics which vary in different patients.

The pseudo-perfectionist is concerned with the idea of excellence but achieves it infrequently. For him, such accomplishment is more a subject for fantasy and he gives the impression of not truly feeling it as a com-

From Department of Psychiatry, State University of New York College of Medicine at New York City.

ponent of reality functioning. It seems to be something he assumes he should want because he believes it is considered right and a socially acceptable ideal. He falls short of this repeatedly and is dissatisfied.

The pseudo-perfectionist is less realistic and accurate in appraising relative merits of the final products of his efforts. At times he may strive for betterment. More often he permits long periods of time to pass without such striving. Instead of utilizing his energies with constructive intent, he will ruminate about his difficulties and shortcomings. The self-criticism of the pseudo-perfectionist is not geared as much in the direction of amelioration of problem areas and correction of methods. The fact that he is destructively self-critical is secretly regarded as a praiseworthy attitude. The pseudo-perfectionist sometimes expresses satisfaction with his undertakings but true pleasure in achievement through effort is less pronounced for him than for the perfectionist. The build-up in tension and its easing, in relation to creative activity, is less evident. Tension is more apt to be associated with prolonged periods of inactivity.

The pseudo-perfectionist tends to be more obsessive and non-productive in comparison to the compulsive productivity of the perfectionist. Total personality functioning may be more loosely integrated. At the same time, because of less compactness in compulsive features, he may be more pliable in the face of additional pressures rather than more rigid and brittle as are some perfectionists.

The pseudo-perfectionist less often experiences a feeling of gratification in the results of his efforts. Usually his level of self-esteem is low. Like the perfectionist, the pseudo-perfectionist desires the respect of others and would like to have some reward for his work. Unlike the perfectionist, the pseudo-perfectionist finds it difficult to postpone the need to reap returns while putting energy into endeavors. He wants more immediate returns. While basically desiring rewards, often without realizing it fully he is quite reluctant to apply sustained effort with considerable expenditure of energy to achieve good results. The process of work itself does not entail much pleasure. This lack simply adds to dissatisfactions in other areas.

Pseudo-perfectionistic characteristics are an expression of general insecurity. They do not supply a helpful compensatory function. They appear to constitute a weak attempt to hold anxiety in check. As an unsatisfactory solution, they promote additional anxiety. The dissatisfied pseudo-perfectionist is more demanding of others than is the perfectionist. His demands complicate interpersonal relationships, are expressed with distortions and confuse basic issues.

If conversant with psychological matters and terminology, the pseudo-perfectionist speaks of himself as a perfectionist. While deploring what he regards as his perfectionism, especially when he believes his characteristics are a significant aspect of his neurotic problems, the pseudo-perfectionist, more than the perfectionist, does regard his alleged perfectionism as a badge of merit. Such feelings usually are not verbalized, but the belief is firmly treasured far more than he consciously recognizes.

The pseudo-perfectionist is less efficient in appraising realistically his true abilities and potentialities. His view of limitations and shortcomings is also less accurate. Unlike the perfectionist, the pseudo-perfectionist is neither as willing nor as able to mold such limitations into the total framework of endeavors. Anxiety and depression are more pervasive and persistent in the pseudo-perfectionist. Obsessive features are more prominent and compulsive defenses less effective. Feelings of insecurity and lack of self-confidence are stronger and more incapacitating. Productivity is much more sporadic and limited than in the perfectionist. The basic personality matrix is often less integrated and therapeutic efforts find fewer effective and sturdy defenses to reconstruct. The perfectionist has greater opportunity to reinstitute a satisfactory level of functioning that preceded decompensation. The pseudo-perfectionist is less likely to possess this opportunity. Lack of a prior base of fruitful functioning is an unfavorable issue

in prognosis. Here again, the potential for beneficial change involves consideration of other elements in personality dynamics.

Strivings of the pseudo-perfectionist tend more to be misdirected because of inadequate appraisal of abilities and limitations. This is accompanied by considerable unwillingness to reappraise the true self. Alleged perfectionism is used as an excuse for continuation of efforts, no matter how meager they may be, along paths consistent with fantasy requirements. Also, alleged perfectionism is made the basis of an excuse for failure. For the perfectionist, perfectionism is a means to an end and an end in itself. For the pseudo-perfectionist, perfectionism is alleged to be a means toward an end but rarely serves in fact as an end in itself. For the perfectionist the end is a concrete reality with its unconscious determinants. For the pseudo-perfectionist the end exists mainly in fantasy.

The pseudo-perfectionist often experiences the beginning of achievement but has difficulty in following through. Perfectionistic claims become part of his rationalizations. He chooses to believe that with continued effort his goal can be reached. This is hardly to be expected when he is operating in an area where he possesses evident limitations but he prefers to ignore or deny them. When partial accomplishment is effected, efforts cease. He is willing to substitute the fantasy of achievement for its actuality. This bears some similarity to what has been described as a concept of assurance of illness reversibility. For patients who harbor as a major goal in treatment the wish to assure themselves of the reversibility of their illnesses, treatment is terminated once this goal is achieved. The specific goal may be seen as part of the larger issue of retention of symptoms for secondary gain. Various ramifications of such reactions have been described.[1]

Perfectionistic trends are usually mentioned in connection with the compulsive personality.[2] Often they are referred to as an outgrowth of parental perfectionistic training.[3] Occasionally more thorough evaluations appear. Horney devoted considerable attention to these issues[4] describing the perfectionistic type as methodical and too meticulous with detail. Concern with what he should do and how to do it precludes spontaneity and originality and fosters slowness and lack of productivity. Exacting demands lead to overwork and exhaustion and others suffer for it. Demands on others impair their functioning as well as his own. It is evident that these views expressed by Horney differ in certain respects from those outlined in the present account. The differentiation between what has been described as perfectionism and pseudo-perfectionism is not taken into consideration. This, however, is understandable because of merging trends in many people depending upon the areas of personality functioning primarily involved. Intertwining patterns exist here as they do with so many attributes classified in the range of psychiatric categories. The more clear-cut examples permit clarification and differentiation.

26 W. 9th St., New York 11, N. Y.

REFERENCES

1. Schneck, J. M.: *Dis. of Nerv. Syst.,* 17: 191-193, 1956.
2. Noyes, A. P., and Kolb, L. C.: "Modern Clinical Psychiatry." Philadelphia: *W. B. Saunders,* 1958.
3. Cameron, N.: "Psychology of Behavior Disorders." New York: *Houghton Mifflin,* 1947.
4. Horney, K.: "Neurosis and Human Growth." New York: *W. W. Norton,* 1950.

Problems in Providing Psychiatric Consultation to Rural Physicians

JOHN S. VISHER, M.D.

Psychiatric services are available in California, as in most other states, primarily in the large metropolitan areas, while in vast regions of the State there are no psychiatrists in private practice. The physician in these rural areas must function as his own psychiatrist, without any kind of psychiatric consultation, or else send his patients to urban hospitals or city specialists for diagnosis or treatment.

The author, a psychiatrist in private practice, and two colleagues, a psychiatrist and a clinical psychologist, decided to explore the possibilities for providing psychiatric consultation services to rural physicians on a private basis. We felt we possessed special qualifications for the task since two of us are licensed private airplane pilots, and thus able to reduce travel time to a minimum while maximizing time available for service. As originally conceived, our plan was to utilize the excellent network of rural airports, spending a day or two a week on regular weekly or monthly visits to various areas where one or several physicians required our services.

We were advised that we needed the support of county medical societies in order to overcome the natural suspicion of outsiders on the part of the physicians in the counties we would be able to serve most economically. Consequently, we wrote personal letters to the presidents of 18 county medical societies located between 50 and 200 miles of the San Francisco Bay area. Counties selected were those in which no psychiatrist was known to be practicing within easy commuting distance of the center of population. There were a few exceptions to this choice, where we had reason to believe that the need for psychiatric services might be much greater than could be satisfied by the local psychiatrist, and we were able to obtain his cooperation in our project.

In our initial communication we introduced ourselves, giving a brief resume of our areas of competence, and inquiring as to the existence of a need for private psychiatric services. We offered to provide further information and references if desired. We suggested that we were not only prepared to offer individual consultation to physicians who might wish to discuss one or several patients,, but would be qualified to discuss general problems in the management of patients in individual or group consultations or seminars with several doctors or with public agency staffs. We also offered psychological services in personality and intelligence testing. In a follow-up letter, we attempted to make definite arrangements for interviews in his own community with the County Medical Society President or other interested physicians he might delegate to meet with us.

We were not prepared for the lack of response. Only from eight counties was there a reply of any kind, and of these only two were sufficiently interested in our proposal to arrange personal interviews. The leaders with whom we met on those occasions were enthusiastic but when they presented our proposals to the two medical societies concerned following our visit, insufficient interest was expressed to warrant further effort.

Through friends and other sources including employees of the State Department of Mental Hygiene, we obtained the names of 11 physicians who were reputed to have a special interest in psychological medicine and mental hygiene, and we wrote to them personally. Of six replies received three were refusals. Of those responding favorably, none actually followed through with personal contact or referrals. Several felt

that we should establish an office in the community and make ourselves known there before sufficient rapport could be established with local doctors. Among the objections were, "Arrangements to refer patients are awkward," and, "It is easier to send patients to the city."

Discussion and Conclusions

We have attempted to determine the factors responsible for the lack of interest in a "delivered at your door" psychiatric consultation service. First and most important seems to be the fact that there is no substitute for personal contact in overcoming the natural suspicion and resistance of rural physicians to psychiatry and the "big city specialist." Our problem was that we could not arrange this personal contact without being more aggressive and intrusive than we cared to be, and without spending more time away from our local practices than we could afford.

Patient resistance, also, could have contributed to the negative reaction of the physicians. Patients in rural areas lack sophistication regarding psychiatry and the role of emotions in illness and tend to be more tolerant of "eccentricity" than residents of large cities. In addition, the factor of cost of such services may have been a deterrent to many. Although we had planned to charge our regular Berkeley fees for actual consultation time plus transportation costs at the rate of approximately $18.00 per flying hour divided among the patients seen on the visit. Actually, we did not reach a point of discussing specific fees in more than a few instances.

Many physicians apparently do not want to assume therapeutic responsibility for psychiatric patients and would prefer to "do nothing" or to send them to a hospital or a specialist in the city, rather than to attempt to carry the patients themselves with consultation. A service which would not include therapy because of infrequent visits to any one community, therefore, seemed of little value to the busy practitioner.

School psychologists are available in many rural communities for such services as intelligence testing and counseling on school problems of children.

There seemed to be a preference in a few psychologically sophisticated small cities for trying to attract a psychiatrist or psychologist who would be on a full-time basis, rather than for such services as we proposed.

In at least two instances, a community which seemed to offer many possibilities for our service proved to be resistant because many physicians in the community had become disillusioned with the help psychiatry could offer due to unfortunate experiences with other psychiatrists who had practiced there, and whose behavior had tended to antagonize the community. In several other situations, inadequately trained physicians or psychologists were practicing, in some cases using hypnosis, and we felt that outsiders like ourselves would have had difficulty displacing them. We were also handicapped somewhat by our inability to contact non-medical groups or agencies directly, because of an official opinion of the ethics committee of our own county society.

It would seem to us that a program such as ours will not be successful until there has been a good deal of continuing education and enthusiasm stimulated by those within the community itself. Even if we had the time and resources for the attempt to stimulate local interest from the outside, we believed that it would have been a long, up hill battle. Ultimately, it would appear to us, the problem of providing psychiatric services in rural areas will have to be answered either by full-time mental health personnel practicing locally and devoting considerable time to an educative effort, or by the active support and interest of local medical or lay groups which are in a position to sponsor outside psychiatric consultants.

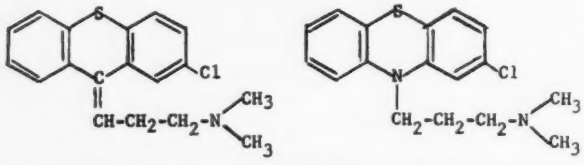
3031 Telegraph Ave., Berkeley 5, Calif.

Clinical Experience with Taractan

F. CORNU, M.D., and H. HOFFET, M.D.

The search for new, effective and well-tolerated neuroleptic drugs has led to the discovery of a new class of compounds,* the thioxanthene derivatives, which possess pronounced psychotropic properties. Detailed reports on its pharmacologic properties have been published by Pellmont et al.[1,2]

Taractan is related chemically to chlorpromazine. As is seen in the structural formula shown below, both compounds have a chlorine atom attached to the 2 position of the skeleton, and both have the same side chain. However, in place of the nitrogen in the phenothiazine ring, Taractan has an unsaturated carbon atom.



Taractan *Chlorpromazine*

It is due to this modification of the molecule that the clinical action spectrum of Taractan differs in part from that of chlorpromazine. As was pointed out in the early reports on Taractan[3-15] this drug in comparison with the phenothiazine derivatives, was characterized by a more potent psychotropic effect. It differed in several of its pharmacodynamic properties and produced less somatic side reactions.

Preliminary trials of the new compound in this clinic led to similar conclusions[16] and as a consequence Taractan was included in our therapeutic armamentarium. To date it has been used in 88 cases (27 men and 61 women) within a relatively short period of time. In 80 of these, treatment was maintained from 8 to 103 days, with an average of 34 days. In the remaining eight patients the drug could be used only for a very short period, therefore they are considered in this report only for purposes of evaluating the drug's initial sedative effect.

Dosage and Routes of Administration

Taractan was made available to us in the form of solutions for parenteral use containing 1.5% of the hydrochloride and 1.5% and 5% of the acetate (ampuls of 2 ml., containing 30 mg. or 100 mg.), as well as in the form of sugar-coated tablets of 15 mg. and 50 mg. for oral use. No marked difference in local tolerance to the three types of parenteral solutions was noted, although in prolonged therapy with the 5% solution, complaints about local pain at the injection sites were reported more frequently. However, at this concentration a relatively high dose could be administered rapidly in only 2 ml. of the ampul solution. Because the onset of action was more prompt than with the lower concentration, this was a particularly desirable and practical feature, especially in the case of patients with psychomotor agitation.

In the milder cases, 60 mg. was administered parenterally on the first day and then as a rule the dose was gradually increased to 120 or even 180 mg. daily. Patients with psychomotor agitation, who received an initial parenteral dose of 100 mg. of the acetate, usually were sedated for several hours; subsequently, the daily dose was graduated upward to 200-300 mg., occasionally even to 400 mg.

In general, after a 10-day course of injections, the patients were gradually placed on oral therapy during a 3 to 5 day period. Depending on the severity of the disease, the daily oral dose reached on the 14th, 15th or 16th day was 350 mg., 400 mg. or 500 mg. but in no case was it more than 800 mg. During this phase of treatment, the patients as a rule were no longer confined to their beds, and after another 10-14 days the daily

From Psychiatric University Clinic, Berne, Switzerland.

*The first representative of this class of compounds, the trans-isomer of 2-chloro-9-(3-dimethylaminopropylidine)-thioxanthene, was marketed by F. Hoffmann-La Roche & Co., Ltd., of Basle, under the trade name Taractan (experimental number designation Ro 4-0403). The same compound is marketed by H. Lundbeck & Co. of Copenhagen and Malmö, under the tradename Truxal.

amount was, if practical, reduced to a maintenance level of 50, 100 or 200 mg.

In the few cases where only the oral tablets were used, the initial daily dose was 100 or 150 mg. which, if necessary, was then gradually increased after the first few days to 200 to 300 mg., in a very few cases to 400 to 600 mg.

Results

Table I summarizes the results obtained in the various syndromes included in the series. As explained in the footnote to the table the results are shown in terms of four levels or categories of clinical improvement.

TABLE I

SYNDROME	*Clinical Results** I	II	III	IV
Schizophrenias (except depressive and manic-like syndromes)				
Acute first onset	1	1	–	1
Acute exacerbations in rhythmical course of disease	2	1	1	–
Exacerbations in chronic course of disease	3	14	10	6
Depressive Syndromes				
Schizophrenic depressions (in the true sense)	2	–	–	–
Depressive-anxiety in chronic paranoic schizophrenia	3	1	–	–
Melancholias (manic depressive types)	1	1	1	1
Involutional depressions	1	2	–	1
Organic depressions	–	3	1	2
Reactive and psychopathic depressions	–	3	–	2
Manic-like Syndromes				
Manic-like agitation in schizophrenias	–	3	–	–
Manias (manic depressive types)	1	–	1	1
Manic-like agitation in psychopaths	–	–	–	2
Acute States of Emotional Disturbances and of Agitation				
In epilepsy	–	–	3	2
In oligophrenia	–	–	1	–
Alcoholic Psychoses	–	–	1	–
	14	29	19	18
	43		37	

*Group I —Marked disappearance of the predominant symptoms with the possibility of social rehabilitation.
II —Appreciable medical and social improvement.
III—Noticeable, but clinically inadequate effects.
IV—No effect.

The cases are grouped primarily on the basis of syndromes rather than disease entities because neuroleptic drugs do not exert specific effects against particular psychoses. Increasing experience with modern psychotropic drugs has demonstrated quite clearly that the pharmacotherapeutic results depend primarily upon the correct choice of a drug aimed at particular target symptoms, and less upon systematic diagnostic procedures which frequently vary considerably.

As seen in Table I, there were 43 (54%) excellent or good responses (Groups I and II) and 37 inadequate or negative responses (Groups III and IV). The results were particularly noteworthy inasmuch as a considerable proportion of the patients were chronic cases with unfavorable prognoses who earlier had been treated unsuccessfully with other neuroleptic drugs or with insulin or electroshock therapy. Thirty-five could be discharged or were able to take outside jobs while remaining institutionalized.

A little more than half of the patients (46) suffered from exacerbations of chronic schizophrenic conditions or from acute relapses of chronic schizophrenia with a rhythmical course; 29 of these showed excellent or good responses (Groups I and II). Taractan promptly produced psychomotor sedation, controlled anxiety, agitation and delusional states, while at the same time morbid manifestations gradually receded into the background. Delusional ideas and hallucinations diminished, confused speech became orderly and negativistic attitudes were abandoned. Two patients, previously treated with several other neuroleptics, became much more amenable to psychotherapy in depth. This was primarily du to the relaxing effect of the drug and, according to one patient, to the fact that in contrast with earlier treatments with chlorpromazine, Taractan reduced his intellectual activity to a considerably lesser extent despite the neuroleptic relaxation obtained.

In schizophrenics with psychomotor agitation, Taractan had a good initial sedative effect which usually became quite pronounced during the first few days, confirming an observation previously reported by

Arnold.[17] Following an intramuscular injection, the effect was usually seen within 10 to 15 minutes and in the most responsive cases lasted up to 12 hours. After initial sedation a temporary phase of agitation ensued between the third and seventh day of treatment in a few patients. This was accompanied by a worsening of the condition. Similarly, in a few patients increasing resistance to the medication was observed following the initial sedative effect of the drug.

Schizophrenic depressions and chronic paranoic schizophrenias with anxiety and depression responded particularly well. Fehr et al.[18] also have reported reliable results in paranoic and catatonic schizophrenias with a vital-depressive element. Our experiences corroborate this and indicate that the drug had a pronounced effect against anxiety, thus brightening depressive states. These findings again support previous observations that schizophrenias respond best to neuroleptic therapy if increased affective agitation is a prominent element of the condition.[19,20]

Manic-like agitation in schizophrenias was helped effectively while manias of the manic-depressive type did not respond as well. Among the cases of depression from the manic-depressive group, those that were involutional, organic and psychopathic were found to respond most favorably when anxiety and agitation were prominent features. This observation has also been emphasized by Fehr et al.[18] and by Poeldinger.[21]

Tolerance

Listed in descending order of frequency, the following somatic side effects were noted in the 80 patients who received Taractan for prolonged periods (Table II):

Although orthostatic hypotension, the most unpleasant and frequent side effect of parenteral Taractan therapy, is longer lasting than with chlorpromazine, it is readily overcome with the help of circulatory stimulants. Comparatively rare but annoying is incontinence, which also has been seen after phenothiazine derivatives. The occurrence of extrapyramidal symptomatology is infrequent with Taractan, even when the drug is used in the higher dosage ranges; up to now we have seen but one clear-cut Parkinson-like syndrome. In two cases a slight tremor of the hands was seen and in two others pronounced motor unrest. In a patient with severe epileptic dementia and in another patient with erethistic imbecility and brain damage, a faciolingual masticatory syndrome with speech disturbances, salivation and hysterical behavior was observed. There were no hyperergic reactions or cases of photosensitization. Local infiltration was seen less often with Taractan than with chlorpromazine.

TABLE II

Orthostatic hypotension, with subjective symptoms	22
Weight gain	17
Tachycardia	16
Local pain at the injection sites	10
Extrapyramidal symptoms	7
Local infiltration	6
Incontinence of urine	6
Orthostatic collapse	5
Dryness of the mouth	5
Disturbance of ocular accommodation	4
Constipation	occasional
Dyspnea	occasional
Excessive perspiration	occasional
Nausea	occasional
Vasomotor rhinitis	occasional

On the whole, we consider Taractan a well-tolerated neuroleptic compound. In this connection it would be wrong to simply stigmatize certain somatic side effects as undesirable in the absence of information about the extent to which pharmacotherapeutic actions may be related to these reactions, particularly those of the vegetative type.[22] Friesewinkel[23] remarked that drugs acting on the circulation and psychopharmacological drugs with a predominantly vegetative action (such as Taractan) are apt to produce tranquilizing and sedative effects when they are administered even in small doses to normal subjects, whereas compounds which produce chiefly extrapyramidal phenomena have depression-promoting and excitatory effects. The clarification of the relationships between the various somatic side reactions and the pharmacotherapeutic effects would consequently appear to be an important subject

for future clinical investigation. Consbruch and Faust[24] and others have recently emphasized that the lasting effect of the neuroleptics (i.e., the effect which continues after cessation of their administration) is a consequence of a "shock" and alteration in the "vegetative-vital substratum" of the patient, since the various neuroleptics differ in both mode and intensity of action upon the vegetative periphery as well as upon the central vegetative areas.[25-27] It must also be assumed that the changes in serum albumin which occasionally occur during courses of treatment with neuroleptics[28-32] are due to central regulatory effects connected with the action of the neuroleptic drugs on the central vegetative areas.

In this series serum albumin was determined in 16 cases by means of paper electrophoresis. In 11 patients there were no significant changes while in five a significant drop in albumin and an increase in the alpha-globulins occurred during the early phase of therapy. In three of these the values had again become fully normal by the end of the treatment period; in the other two the starting values had not yet been fully reached, although there was a distinct normalizing tendency. These electrophoretic findings argue against a possible hepatotoxic effect of Taractan, and this view is corroborated by our determinations of the alkaline serum phosphatase at weekly intervals in 15 cases which uniformly yielded values within the normal range. As mentioned, the temporary shifts in the serum albumin values must be considered as central regulatory effects and connected with them are the occasional marked accelerations of blood sedimentation rates seen at the onset of treatment, followed by rapid normalization.

In some cases there was a slight increase in the leucocyte count and an occasional relative lymphopenia or eosinophilia.

Electroencephalogram

Electroencephalograms were made on 14 patients before and at the peak of treatment. Six patients showed no significant changes. In three there occurred a slowing of the alpha rhythm and an increase in the theta frequencies. A previously existing distinct beta activity over the fronto-precentral areas disappeared completely in two patients. In one case the beta frequencies disappeared without any appreciable slowing of the basal rhythm. In two patients steep waves of a paroxysmal character appeared; in the last two there was massive synchronization under the influence of photostimulation, accompanied in one case by the appearance of generalized spikes.

Similar EEG changes have been seen with other neuroleptic drugs when administered routinely over a period of time. Our results suggest that Taractan, like the phenothiazine derivatives or reserpine, depresses the reticular activating system resulting in increased synchronization of cerebral electrical activity. The appearance of generalized spikes, seen in one of our cases under photostimulation, suggests that under certain circumstances Taractan might also produce epileptic seizures. However, with the doses we used, no such seizures have been seen up to this time.

Discussion

Taractan, which is chemically and pharmacologically related to the phenothiazine derivatives, particularly to chlorpromazine, was found to be an effective and well-tolerated neuroleptic. It differs in part from chlorpromazine in its clinical action and in its somatic side effects, extrapyramidal motor syndromes and local infiltration occurring less frequently with Taractan, while the vegetative side effects were more prominent. In this connection, orthostatic hypotension occurred more frequently and was longer lasting than with chlorpromazine, and occasionally led to collapse. However, it is not impossible that there is a relationship between the circulatory effects and the tranquilizing properties of the compound.

In the majority of cases, Taractan exerted good initial sedation in patients with psychomotor agitation. The onset of action was faster than with chlorpromazine, an advantage where the drug is to be used as a broad spectrum neuroleptic. The soothing, relaxing effects, the relief of anxiety and

the sleep-facilitating properties were lasting and rather constant. Drive was in most cases definitely reduced, and anxiety, agitation, hallucinations and delusional states regressed or disappeared completely.

Due to this good neuroleptic effect, comparable to that of chlorpromazine, favorable results were obtained in the most diverse forms and courses of the schizophrenias. Taractan was beneficial both in schizophrenic conditions with depressive anxiety and in depressions characterized by anxiety and agitation. The primary action of the drug appears to be the alleviation of anxiety, often resulting in a secondary antidepressive effect—a mode of action rarely seen with chlorpromazine. Thus, the main target symptoms for which Taractan seems to be indicated are psychomotor agitation on the one hand, and on the other, conditions characterized by anxiety and depression in endogenous, endoreactive and organic psychoses (with the exception of the epilepsies).

Conclusions

A new thioxanthene derivative, Taractan, was administered to 88 psychiatric patients. The drug was found to be a reliable, rapidly acting neuroleptic compound useful in all types of states of agitation, particularly in schizophrenias. It exerted a pronounced effect in conditions of depressed anxiety as well as in agitated depressive syndromes. Orthostatic hypotension was the most common side effect but extrapyramidal symptoms occurred infrequently.

BIBLIOGRAPHY

1. Pellmont, B., et al.: *Helv. Physiol. Acta.,* 18: 241 (1960).
2. Pellmont, B., et al.: *Schweiz. med. Wschr.,* 90: 598 (1960).
3. Alsén, M., and Frey, T. S.: *Svenska Läk.-Tidn.,* 56: 3344 (1959).
4. Boittelle, M. G., and Boittelle-Lentulo, Cl.: *Ann. méd.-psychol.,* 117/2: 515 (1959).
5. Demay-Laulan, M., et al.: *Ann. méd.-phychol.,* 118/1: 333 (1960).
6. Galeano, J., et al.: *El Dia méd. Urug.,* 26: 2748 (1959).
7. Geller, W.: *Med. Klin.,* 55: 554 (1960).
8. Halberkann, J.: *Fortschr. Med.,* 78: 55 (1960).
9. Kruse, W.: *Amer. J. Psychiat.,* 116: 849 (1960).
10. Madsen, E., and Ravn, J.: *Nord-psychiat. T.,* 13: 82 (1959).
11. Mall, G.: Kölner Truxal-Symposium 1959; cit. in *Halberkann.*
12. Møller Nielsen, J., et al.: *Ugeskr. Laeg.,* 121: 1433 (1959).
13. Nieto, D., et al.: *Neurol. Neurocir. Psiquiat.,* 1: 30 (1959).
14. Ravn, J.: *Wien. klin. Wschr.,* 72: 192 (1960).
15. Werenberg, H.: *Ugeskr. Laeg.,* 121: 1736 (1959).
16. Hoffet, H., and Cornu, F.: *Schweiz. med. Wschr.,* 90: 602 (1960).
17. Arnold, O. H.: *Wien. med. Wschr.,* 109: 892 (1959).
18. Fehr, H., et al.: *Schweiz. med. Wschr.,* 90: 600 (1960).
19. Fluegel, F.: *Nervenarzt,* 28: 481 (1957).
20. Ditfurth, H. V.: *Nervenarzt,* 26: 54 (1955).
21. Poeldinger, W.: *Praxis,* 49: 468 (1960).
22. Bente, D., et al.: *Med. exp.,* 2: 68 (1960).
23. Friesewinkel, H.: *Med. exp.,* 2: 81 (1960).
24. Consbruch, U., and Faust, Cl.: *Wien, klin. Wschr.,* 72: 285 (1960).
25. Engelmeier, M. P.: *Psychiat. Neurol.,* 138: 47 (1959).
26. Selbach, C., and Selbach, H.: *Nervenarzt,* 27: 145 (1956).
27. Selbach, C., and Selbach, H.: *Wien. klin. Wschr.,* 69: 727 (1957).
28. Consbruch, U., and Faust, Cl.: *Arch. Psychiat. Zschr. ges. Neurol.,* 197: 279 (1958).
29. Hippius, H., et al.: *Klin. Wschr.,* 36: 417 (1958).
30. Hippius, H., et al.: *Klin. Wschr.,* 36: 530 (1958).
31. Hippius, H., et al.: *Med. exp.,* 2: 110 (1960).
32. Hippius, H., and Kanig, K.: *Arzneim.-Forsch.,* 8: 745 (1958).

Ambulatory Psychotherapy for the Schizophrenic Patient with the Aid of Drugs

F. KANT, M.D., and H. B. ABELE, M.D.

The advent of the ataractic drugs has opened new possibilities for treating the psychotic patient in an out-patient clinic. The majority of the sixty patients we are reporting on would previously have required hospitalization. There still were a considerable number of patients who had to be committed to the state hospital after evaluation. They either appeared dangerous to themselves or to those they came in contact with or were without family or friends to care for them. The number of immediate commitments decreased as our experience in handling the acute psychotic episodes in the out-patient relationship grew.

By selecting from the entire psychotic group only the schizophrenic reactions for this study, a more uniform and valid discussion is possible. The first sixty schizophrenic patients starting August 1957 are the material for this study. Of these 27 were colored and 33 were white patients. All were from low or medium income groups, 39 females and 21 males.

The personnel of the clinic consisted of two staff psychiatrists and four medical students. Every patient was seen by a staff psychiatrist. The clinics were held weekly. Work with the patient's family was carried out, for the most part, by the Social Service Department. Continued interviews with pertinent members of the family were carried on while the patients were seen in therapy. This was of the greatest importance in educating the family members to accept the patient as a sick person. The relatives needed explanation, advice and emotional support for their role in helping the patient.

Supportive psychotherapy was used. Although the distinction between supportive and uncovering psychotherapy is well defined there is much overlap. Through the discussion of his problems, his attitudes and his behavior in interhuman relationships, especially in the family setting, the patient will frequently develop understanding of motivations of which he had not been aware. The therapist need not avoid leading the patient to self-evident interpretations.

Therapists are still groping for the essentials in the therapeutic approach to the schizophrenic patient and a broad field for scientific research is open. There is much disagreement, contradiction and confusion in this area. However, it has been established that in a considerable number of cases, a transference in the sense of establishing an interpersonal relationship between patient and therapist, can be achieved. This is the prerequisite for any form of psychotherapy.

In discussing the problem of psychotherapy of the schizophrenic, one should endeavor to distinguish between fact and fiction. We must attempt to correlate all available facts in our conclusions and avoid autistic pursuit of preconceived ideas. We can understand a great deal of the dynamics underlying symptom formation in the schizophrenic syndrome. However, "what the schizophrenic process is we do not know," as Bleuler stated in 1911. As far as etiology is concerned, no valid theory has so far corrected our lack of knowledge. Self satisfied theories in psychoanalytic, ecological or purely physiological terms result only in retarding progress in research. An interesting observation of possible etiologic significance was made by Kempf. He felt that the schizophrenic reaction resulted from the lack of love these patients had experienced, and the inability to express aggressive and internal affective needs through the common constructive outlets that serve the normal person.

That schizophrenic patients actually lacked

Presented at the Annual Psychiatric Symposium, The Bradley Center, Columbus, Georgia, March 11-12, 1960. From the Psychiatric Department, University of Alabama Medical College.

love or at least felt that they had lacked love is a pertinent observation. It would be a mistake, however, to generalize this for all schizophrenics. Furthermore, there are many human beings, who experienced lack of love and did not develop a schizophrenic reaction. The second part of Kempf's statement returns us to the enigma of what is schizophrenia. Most psychological theories endeavoring to understand the schizophrenic process are merely descriptive statements of psychopathological behavior. Narcissism and regressive characteristics are obvious in the schizophrenics. The "intolerable stress" frequently mentioned is a stress "intolerable" for the schizophrenic, understandable as "intolerable" only for the abnormally hypersensitive ego.

Our conviction that schizophrenic patients can respond to psychotherapy is not related to a concept of the etiology of the disorder. It stems from statements by schizophrenic patients of the effect of intensive psychotherapy. These patients are not in the group presented in this paper.

In the close interpersonal relationship between patient and physician in psychotherapy, the personality of the therapist is sometimes of greater importance than the method used. His actions, gestures and remarks will be interpreted by the patient in terms of his emotional needs. This has been emphasized by many investigators. An interesting study by Betz and Whitehorn has shown, by evaluating the therapeutic effect of a large number of resident physicians, that schizophrenic patients do consistently work more effectively with one physician than with another. The author's comment on the more successful physicians: "Schizophrenic patients just take to them and they take to the patients, and we don't know much about why." This is true in my experience not only with regard to physicians, I have seen the same in psychiatric nurses with long years of experience. Some like to care for schizophrenic patients and are successful in giving them food when they are resisting and are able to calm the agitated patient while others lack this ability. It is in fact easier for some psychiatrists and psychiatric nurses to sympathize with schizophrenics than with certain neurotics because the former's suffering may impress the observer as more genuine. There are, however, psychiatrists who are bewildered by the bizarre and disorganized behavior of the schizophrenic and thereby are deprived of the capacity for empathy and the desire to come closer to these patients. Others may lack the patience required to approach an unresponsive schizophrenic. That these interpersonal affinities and antagonisms are correlated to certain aspects of the therapist's personality structure is certain but in general terms difficult to define. Only intimate knowledge of the individual therapist can give the answer.

The importance of the first contact with the patient may not be at all in evidence when dealing with a schizophrenic. He may remain mute and negativistic. However, when he has emerged from his shell we may realize how it affected him and that he registered everything that went on during the first therapeutic session. Complete passivity and silence by the therapist in the presence of an aspontaneous, mute patient is a threat to the schizophrenic. The therapist's capacity to listen with concentrated attention is important, but if the patient remains silent the therapist must take the lead. Most schizophrenic patients have a high degree of sensitivity although in certain phases of their illness this is not recognzable from their emotional response. Eissler has pointed out that the schizophrenic patient has a lower threshold for the perception of emotional changes in the environment. This is tied in with the schizophrenic's desperate experience of inferiority, of lack of self respect and self esteem. There is nothing hypothetical about this assumption. It is a fact and is clearly evident from the patient's direct communications or his overcompensation with grandiose or paranoid ideas. In our opinion, one of the main psychotherapeutic tasks is helping the patient overcome this deep-seated feeling. This can be accomplished in different ways varying with the individual case. The patient must sense the respect and regard the therapist has for him. Kempf mentioned, "reconstructive results . . . occur

when an altruistic transference can be maintained." Sullivan felt that primitive sympathy by the doctor toward the patient was of major importance. Fromm-Reichmann and Schwing stress the need of giving assurance that he is loved. All these statements and many others by various therapists treating schizophrenic patients point in the same direction. It is obvious that sympathy and the assurance of love will affect the schizophrenic patient. Being loved, being esteemed and respected by his fellowmen increases the feeling of self value in every human being. This is true of the schizophrenic whose self respect is at its lowest ebb.

In the course of therapy it is equally important to draw the patient away from ruminations concerning his liabilities and deficiencies by making him aware of his assets. The importance of occupational, or to use a more adequate term "work-therapy" as a tool in the process of psychotherapy of the schizophrenic cannot be overestimated. It is remarkable to see how latent capacities are stimulated by a teacher who is interested in individuals. However, any type of work is a beneficial adjunct to psychotherapy as Bleuler emphasized. Work draws a patient out of his autism and re-establishes contact with normal living and reality. In this respect a number of our patients received help through the Alabama Vocational Rehabilitation Center. The results of the personal interest and effort in training these patients in the Center was evident in their general improvement. The patients were encouraged to look for work as soon as possible.

The drugs used in this group were Thorazine, Stelazine, Sparine, Trilafon, Prozine (200 mg. of Equanil with 50 Mg. of Sparine), Frenquel and Ritalin. Most useful in the severely disorganized cases were Thorazine and Stelazine. It was difficult to predict which should be the drug of choice in a specific case of schizoaffective reactions. On many occasions we changed the drug. Frenquel appeared to be effective occasionally when the patients experienced their auditory hallucinations as coming from the outside. In other cases we were not able to see any effect with Frenquel. The very restless patient appeared to respond better to Thorazine, while for the withdrawn, hallucinating and delusional patient, Stelazine was more effective.

With the exception of five cases all patients were started on ataractic drugs and no attempt can be made to determine whether a drug or psychotherapy was responsible for the ultimate improvement. However, some patients on medication when discharged from the hospital would take an unfavorable course but would improve with participation in the clinic.

Evaluating the progress a psychotic patient makes in the course of therapy is less difficult than when we are dealing with psychoneurotic patients. The former manifests his improvement in an obvious manner by returning to reality and re-establishing interhuman relationships, while at the same time the concrete experiencing in the form of hallucinations or pseudo hallucinations disappears.

Outcome of Sixty Schizophrenic Patients Treated in the Outpatient Clinic

Remissions	11
Good Improvement	13
Improvement—but not able to resume former activities	14
No essential improvement, but not requiring hospitalization	8
Hospitalized	14
	60

We have not used any of the symptom rating scales although they give an impression of accuracy because the basis of these scales is also a product of subjective evaluation.

Cases designated as remissions manifested an appropriate emotional response in addition to the disappearance of other psychotic symptomatology.

After termination of treatment the rate of remission and good improvement has been higher. Patients classified as negative or hospitalized were not reexamined. We know that some of these have shown improvement. However, this did not occur as a result of the treatment in the clinic. The longest remission is two years duration. This patient had

been manifestly and continuously psychotic for 4½ years. All remissions had been weaned of drugs. It is important that the withdrawing of ataractic drugs be carried out gradually.

The onset of a schizophrenic reaction can only be approximately estimated, if at all. If we consider the manifest psychotic symptomatology as the onset, then we have eight cases under one year duration. Of these, four achieved a remission, one showed good improvement, two no improvement and one patient was committed to the state hospital. These figures bear out the fact that early treatment is more likely to produce remission.

Summarizing, we can say that 46 of our patients did not require hospitalization. However, we are not able to state whether they did better than they would have in a hospital setting. We have the impression that the insight achieved by the patients in remission was better than we see in patients following different forms of shock therapy. The reason may be that the patient can follow with awareness the course of his recovery. After shock treatment there is a vacuum between psychosis and remission and the patient's recollection is often restricted to the experience of a nightmare in the past. In schizophrenics following shock therapy the relapse rate is high. So far we have no adequate proof that patients in remission following the combined drug and psychotherapy treatment do not relapse in the same manner. Comparative studies carried on over a longer period of time will be a more conclusive research project.

Another question concerns the duration of out-patient treatment in the above manner in cases where no improvement in response to therapy is evident. It is our feeling that, if after six months, there is no beneficial response present, then the patient should be given the opportunity to receive shock therapy.

REFERENCES

Kempf, E. J.: "Psychology." *C. V. Mosbey Company,* St. Louis, Mo., 1920.

Betz, B. J., and Whitehorn, J. C.: The Relationship of the Therapist to the Outcome of Therapy in Schizophrenia. *Am. J. of Psychiat.,* Nov. 1954.

Eissler, K. R.: Limitations to the Psychotherapy of Schizophrenia. *Psychiatry,* #6, 1943, pages 381 to 391.

Bleuler, E.: "The Group of Schizophrenias." *Leipzig,* 1911.

Sullivan, H. S.: Affective Experience in Early Schizophrenics. *Am. J. of Psychiat.,* 6: 468-483, 1927.

Sullivan, H. S.: Notes on Investigation, Therapy and Education in Psychiatry and Their Relations to Schizophrenia. *Am. J. of Psychiat.,* 10, pages 271-280, 1947.

Fromm, Reichmann, F.: "Principles of Intensive Psychotherapy." *University of Chicago Press,* Chicago, Ill., 1950.

Schwing, Gertrud: "A Way to the Soul of the Mentally Sick." *Rascher Publisher,* Zuerich, 1940.

The Passive Aggressive Alcoholic Personality

EDWARD PODOLSKY, M.D.

The passive aggressive personality is frequently encountered in psychiatric practice. In general, his actions are characterized by a constantly angry reluctance and a calculated inefficiency. He grumbles, protests and procrastinates but somehow he lacks the courage to openly accuse or rebel. This type of individual makes many demands which when gratified, result not in pleasure but only in more demands and new conditions. He often has a marked resistance to work, usually based on a sincere conviction that he is incapacitated by some illness such as excessive and intractable headaches, extreme anxiety or fretful tension.

Presently, three types of the passive aggressive personality are recognized:

a) *Passive-dependent:* This reaction is characterized by helplessness, indecisiveness and a marked tendency to cling to others.

b) *Passive-aggressive:* The aggressiveness is expressed in these reactions by passive measures, such as pouting, stubbornness, procrastination, inefficiency and passive obstructionism.

c) *Aggressive:* Here there is a persistent reaction to frustration with irritability, temper tantrums, and destructive behavior. A deep dependency is usually evident.

In the passive aggressive personality aggression is a need, or drive that is manifested behaviorally by more or less normal assertiveness. When the aggression is inhibited by internal guilt or fear of external retaliation, regression to a dependent position occurs. This is manifested by passive behavior which may be initiated by an inability to deal with the ambiguity of a role requirement, so that assertiveness gives place to passivity. The final step, dynamically, would be guilt over dependent needs, or external frustration of these needs, leading to pseudoaggression, the behavioral counterpart being hostility. On the behavioral level, shame over a culturally unacceptable passive role leads to hostility.

In the passive-dependent type the following dynamic factors are operative. When dependency needs are brought to the fore, they may manifest themselves directly as passivity. Dependency may be unacceptable because of the internal guilt or external frustration of dependent needs. This in turn has often led to pseudoaggression and behaviorally makes constant demands, often unrealistic. The role of passivity because of its cultural unacceptability and resultant feelings of shame may be transformed to demandingness.

The degree of disorganization is also of significance. It is often evident that the passive-dependent personality is more poorly organized and may defend himself only slightly against the emergence of primary impulses. As a matter of fact, defenses may be absent, and passive behavior may manifest itself as an expression of a basic dependency. In the passive-aggressive personality, on the other hand, there is often an elaboration of defensive maneuvers indicative of a more stable and better organized personality.

The passive aggressive personality is the group most frequently singled out as constituting the typical chronic alcoholic and the greatest number of alcoholics fall into this group. These individuals have passive, neurotic character structures with strong dependency needs. These features are fundamental and so interfere with success in life that the general picture is that of serious inadequacy and often complete failure.

It has been found that most of them have vague goals and poorly directed ambitions and they usually become alcoholic in their twenties. Drinking is used to relieve self-consciousness and tension when faced with any situation in which personal success is important. Every life situation which requires the appearance of maturity produces anxiety and tension. Every failure must be forgotten by more drinking. Constant rationalization produces hostility. There is a

lack of force behind the resentment in these individuals. Their rages and temper tantrums may have the appearance of overemphasized ferociousness. The anger turns readily to self-pity and may be amenable to outside suggestion.

During intoxications, all the behavioral tendencies become exaggerated with the passive features dominating. They are alternately boasting and shy, aggressive and helpless, sympathizing and seeking sympathy, all in a brief span.

As time passes they become more and more aware of their own inadequacy. Attempts to stop drinking are sincere but lead to periods of false security and exhaustive binges. Even in these binges lack of aggressive behavior may be marked.

The following cases are selected out of a large series of passive-aggressive chronic alcoholics:

Case 1: C.I., Negro, 32-years-old, married male. His father, a chronic alcoholic, died at the age of 59. At the age of 17 patient had completed two years of high school and went to work as a delivery boy for two years. For the next 13 years he was a truck driver. He lost considerable time from work because of drinking. He has now been unemployed for four months. He lives with his mother who supports him. He has not made any serious attempt to find work.

The patient entered the army at the age of 18, serving for one year. He was absent without leave for 18 days for which he served 30 days in the guardhouse. Because he was denied a furlough he smashed up the furniture in the hut. For this he was sent to the psychiatric ward in the hospital for one month's observation. He repeated this offense and was again sent to the psychiatric ward. This time he was given a medical discharge.

He was married at the age of 18 and there were six children of this marriage. He has now been separated from his wife for the past eight years.

The patient began to drink at the age of 14, and when he reached the age of 26 he had become a confirmed and excessive drinker. He is a daily drinker, consuming a pint of whiskey, a pint of wine and 20 glasses of beer during a drinking spree.

He is essentially a passive-aggressive personality with marked feelings of inadequacy. He feels threatened by too close interpersonal relationships. In general, he is a poorly adjusted, unstable, restless individual who attempts to solve his difficulties by resorting to alcohol. He desires basically a passive role and there seems to be an element of self-punishment in his repeated exposure to alcohol.

Case 2: H.F., a white, married 37-year-old male. At the age of 18 he had completed one year high school and entered the garment industry as an errand boy. In time he worked himself up to a steamer. This is his present occupation which he has had for the past 20 years. His work record had been consistently good until five years ago when he began to drink heavily and lost considerable time from work.

Subject was married at age 25 but has been separated from his wife for the past five years. His drinking and loss of time from work with subsequent loss of pay resulted in almost daily arguments with his wife and this finally led to a legal separation.

The patient began to drink at the age of 16, and by the time he was 21 he was a confirmed and excessive drinker. He consumes about a fifth of whiskey and 20 glasses of beer during a drinking spree. He states that he drinks to escape from stressful everyday situations. "I have a tendency to worry and when I drink I do not worry so much."

It is apparent that Mr. F. resorted to alcohol because actual situations in the environment became too difficult for him to face. By this means he attempts to shut out reality. He uses alcohol to release his compensatory or secondary introverted tendencies, and retreats into, and seeks satisfaction from his own fantasies, and cravings. In that way he escapes the environmental situations and the dictates of the superego which he finds too difficult to face. It would appear that Mr. F. indulges in alcohol because of his primary tendencies to evade reality, seeking satisfaction in the more primitive cravings arising within himself. He thus attains some sort of emotional homoestasis.

Case 3: J.M., a white, married, 58-year-old male. He was born in Ireland where he spent the first twenty years of his life. Since coming to the United States he has been a dock worker earning a good wage.

The patient married at the age of 29. He states that his marriage had been happy until he began to drink when matters became intolerable and led to constant arguments and bickering.

Mr. M. began to drink at the age of 19. When he had reached the age of 25 he had become a chronic alcoholic. During a spree he consumes a quart or more of whiskey. He states that he began to drink because of tensions and anxieties generated at his work—the shape-up at the docks, the uncertainty of getting work, the constant traveling from dock to dock.

This patient has evidently resorted to alcoholism because he has not been able to face environmental situations with emotional ease. With alcohol he is able to attain a degree of emotional equilibrium.

Case 4: N.G., white, married, 49-year-old male.

At the age of 16 he completed 1½ years of high school and went to work as an errand boy for six months when he was promoted to shipping clerk for the same firm. After his release from the Army he passed an examination for post office clerk which has been his occupation for the past 15 years.

The patient began to drink at the age of 22, wine at first. When he had reached the age of 30 he had become an excessive and constant drinker. He would consume a quart or more of whiskey during a drinking spree. He stated that alcohol enables him to face daily stressful situations with a minimum of tension and anxiety. He craves alcohol to provide a stimulus to escape from unpleasant realities. He has a tendency to flinch from the worries and responsibilities of life and to escape reality by the easiest means available—alcohol indulgence. There is a self-pampering tendency revealing itself as a refusal to tolerate, even briefly, any unpleasant state of mind.

Case 5: F.P.M., a white, 42-year-old married male. He completed one year of college toward a degree in accountancy, but economic conditions forced him to leave school and go to work. He became a city fireman which has been his occupation for the past twenty years.

Mr. M. married in 1941. His wife developed goitre which made her irritable, unstable and at times psychotic. This was a most unhappy marriage. Although a Catholic, the patient departed from church teachings and secured a divorce. He was married a second time in 1953, three years later. His present marriage is apparently a happy one.

The patient started to drink at the age of 20. He consumes about a quart of whiskey when on a drinking bout. Mr. M. is unstable and immature with a tendency to evade reality situations through alcohol. He never had the resolve to take practical steps to attain what he wanted, with resultant discontent, irritability, disgruntledness and more or less general restlessness. These he attempts to allay by going on a periodic binge.

Case 6: J.C., Negro, married, 36-year-old male. He is a tailor by occupation, earning a fairly good salary. He married at the age of 24. He claims that he was happily married until, by reason of his excessive drinking, his wife, 1955, left him and remained away for two years. She left him again in 1958 for a period of one week. When intoxicated he becomes violent and abusive and beats her and otherwise inflicts injury upon her.

This patient began to drink at the age of 14. When he was 20 he had become a confirmed alcoholic. He has been arrested on several occasions for fighting when intoxicated. He states: "I drink to get away from it all. I drink to forget my lost opportunities and failures, and to forget my messed-up life."

Mr. C. found it necessary to drink in order to alleviate anxiety associated with a persistent fear of isolation and apprehension. His morbid dependency on others for advice and stimulation conflict with his own compulsive need for independence and freedom. In alcohol he finds a temporary solution for his mental conflict and it provides a means of establishing interpersonal relationships.

In summary, the passive aggressive alcoholic has the following characteristics:

1. He has poorly defined goals and ambitions.
2. He is usually alcoholic in his twenties.
3. Drinking is used to relieve self-consciousness and tension when faced with any situation in which personal success is important.

Survival Following Overdose of Thalidomide

GUENTHER NEUHAUS, M.D., and KARLA IBE, M.D.

Suicide has been attempted not only with barbiturates but also with nonbarbiturate preparations.[1-4] The toxic symptoms of poisoning with glutaric acid derivatives differ from those associated with barbiturate intoxication. Glutaric acid derivatives when given in overdosage may produce circulatory collapse, whereas derivatives of barbituric acid characteristically produce respiratory paralysis. Our observations[5] are consistent with those of other investigators. We do, however, question the claim of Gerster and co-workers[2] that "central fever" is a characteristic manifestation of poisoning with derivatives of glutaric acid, since hypothermia occurs with other severe poisonings and can also be the result of concurrent infectious disease.

A third type of sleep-inducing agent which behaves in a manner different from that of derivatives of both barbituric and glutaric acids has now been used for attempted suicide. We have had occasion to observe survival in one patient following an unsuccessful, lethal attempt with 144 times the sleep-inducing dose. The new compound, thalidomide, is the N-phthalyl derivative of glutamic acid imide. In pharmacologic studies, Kunz and co-workers[6] reported a very wide margin of safety. In fact, the lethal dose for experimental animals could not be determined since all animals survived the maximum dose administered (5,000 mg./Kg.). The clinical usefulness of this drug as a sleep-inducing agent, and the uncommonly favorable therapeutic action in medical practice, have been described by Esser and Heinzler,[7] Jung,[8] Walkenhorst,[9] Loos,[10] Resemann,[11] Salter and co-workers,[12] Gray and co-workers,[13] and Cohen.[14]

From First Medicine Clinic, Free University of Berlin, Westend Hospital.

Thalidomide is known by different trademarks in different countries: "Kevadon" (U.S.A.), "Contergan" (Germany), "Softenon" (Switzerland), and "Distaval" (United Kingdom). It is manufactured in the United States by The Wm. S. Merrell Co., Cincinnati, Ohio.

Case Report

Past History: The patient, a male laborer, was born in 1938. His family life has been unsatisfactory. He had poliomyelitis early in 1958. He was hospitalized for a short period in December of 1958 following an unsuccessful attempt at suicide with illuminating gas. He made a second attempt at suicide in June 1959 at which time he swallowed a total of 191 tablets, the contents of the medicine cabinet. These consisted of analgesics, antacids, and belladonna preparations but no hypnotics. The total belladonna content was estimated to be 360 mg. He suffered symptoms typical of atropine poisoning with severe central excitement, elevation of skin temperature, dilated pupils, tachycardia and severe thirst. After one hour he recovered. At that time, psychiatric examination revealed a mentally retarded person suffering from a reactive depression associated with a labile personality.

Present Suicidal Attempt. The patient was seen by us on November 2, 1959. He had taken at 1:30 p.m. a dose of 144 x 100 mg. of thalidomide along with a copious amount of alcohol. He was hospitalized at 4:15 p.m., at which time he was unconscious. He awakened and became resistive when the stomach tube was passed. Examination of the stomach contents revealed no fragments of the medication.

After the stomach had been emptied, the patient remained sleepy but he responded verbally to strong arousal stimuli. The pupils reacted to light and accommodation. Normal tendon reflexes were present but diminished in intensity. There were no pathological reflexes. The conjunctiva were injected and the breath reeked of alcohol. The blood pressure was 110/50 and the pulse, 80. Bronchial rales were heard over isolated areas of both lungs. Rectal temperature was 36.6° C. but on the following day it rose to 38.0° C. The fever was attributed to the mild respiratory infection.

The only medication administered was antipyretic for symptomatic treatment of the respiratory infection. Pulse rate, blood pressure, and respiration were determined and recorded every hour for 24 hours. No abnormalities in any vital function were demonstrable. As a result, no specific antidote or treatment was administered or required to overcome the effect of 144 times the sleep-inducing dose of thalidomide.

In the evening on November 2, the patient awakened spontaneously.

Blood counts, urinalyses, blood sedimentation, repeated pulse counts, and determinations of respiratory rate and blood pressure all were normal and remained normal during several days of observation. An electrocardiogram made on November 3 was

within normal limits and revealed a heart rate of 77. The patient was subsequently transferred for psychiatric care.

Discussion

Not only did this patient survive a single dose of thalidomide, equivalent to 144 times that commonly used for induction of sleep, but he did so in spite of the concurrent ingestion of a substantial quantity of alcohol. The patient could not recall the exact quantity of alcohol but the intense injection of the conjunctiva as well as the strong alcoholic breath indicated that it was excessive. In the case of overdosage with other sleep-inducing agents, the concurrent ingestion of large quantities of alcohol makes the prognosis unfavorable.

After the ingestion and apparent absorption of 144 x 100 mg. of thalidomide, there resulted only somnolence as evidence of the action of the drug. Cardiovascular collapse did not occur as would have been expected from such an overdose of a glutaric acid derivative, nor was there the respiratory arrest commonly associated with massive doses of babituric acid derivatives. In fact, much of the somnolence itself might possibly be attributed to the large quantity of alcohol taken with the sleep-inducing agent.

Since very large doses of thalidomide can be given without clinical evidence of toxicity and without producing deep hypnosis or narcosis, the medication must act by a mechanism different from that of other sleep-inducing agents. The extremely wide margin of safety makes thalidomide a unique sleep-inducing agent.

Summary

A 21 year old man attempted suicide by taking 144 x 100 mg. of thalidomide (14.4 gm. of N-phthalyl glutamic acid imide, 144 times the usual dose for induction of sleep). In contrast to other sleep-inducing agents taken in overdosage, thalidomide produced no effect upon respiration or cardiovascular function. The patient survived. No stimulant or specific antidote was required or administered.

REFERENCES

1. Sheppard, H.: Test for Doriden. *J.A.M.A.*, 159: 1052 (Correspondence), November 5, 1955.
2. Gerster, P., Scholer, H., and Züger, M.: Klinische Beobachtungen bei einer akuten Vergiftung mit α-Phenyl-α-äthylglutarimid (Doriden). *Schweiz. med. Wschr.*, 85:991-994, 1955.
3. Blakey, H. H., Barringer, T., and Billig, O.: Acute Doriden Intoxication. *South. M. J.*, 49: 172-174, February 1956.
4. Schreiner, G. E., Berman, L. B., Kovach, R., and Bloomer, H. A.: Acute glutethimide (Doriden) Poisoning: Use of Bemegride (Megimide) and Hemodialysis. *Arch. Int. Med.*, 101:899-911, 1958.
5. Ibe, K., Neuhaus, G., and Remner: To be published.
6. Kunz, W., Keller, H., and Mückter, H.: N-Phthalyl-glutaminsäure-imid. Experimentelle Untersuchungen an einem neuen synthetischen Produkt mit sedativen Eigenschaften. *Arzneim.-Forsch.*, 6:426-430, August 1956.
7. Esser, H., and Heinzler, F.: Klinische Erfarungen mit einem neuen Sedativum und Hypnotikum. *Therap. d. Gegenwart*, 95 (10):374-376, 1956.
8. Jung, H.: Klinische Erfahrungen mit einem neuen Sedativum. *Arzneim.-Forsch.*, 6:430-432, 1956.
9. Walkenhorst, A.: Das hypnotisch und sedativ wirkende N-Phthalyl-glutaminsäure-imid als geeignetes Provokationsmittel bei hirnelektrischen untersuchungen. *Wien. klin. Wchnschr.*, 69:334-339, 1957.
10. Loos, H.: Klinische Erfahrungen mit dem Schlafmittel Contergan forte und dem Tagessedativum Contergan. *Medizinische*, 12:482-483, 1958.
11. Resemann, G.: Zur Therapie von Verhaltensstorungen im Kindesalter. *Medizinische*, 5:203-204, 1959.
12. Salter, C. E., Lodge-Patch, I. C., and Hare, E. H.: Thalidomide: Clinical Trial of a New Hypnotic Drug. *J. Clin. & Exper. Psychopathology & Quart. Rev. Psychiat. and Neurol.*, 20:243-246, July-September, 1959.
13. Gray, R. W., Coats, E. A., Pogge, R. C., and MacQuiddy, E. L.: Kevadon: A New, Safe, Sleep-inducing Agent. *Dis. Nerv. Syst.*, 21, 1958.
14. Cohen, S.: Sleep Regulation with Thalidomide. *Am. J. Psychiat.*, 116:1030-1031, May 1960.

Refusal of Surgical Therapy as an Immediate Life Saving Procedure

JACOB H. FRIEDMAN, M.D.,* and FANNIE I. KAPP, M.D.**

Under existing law it is not permissible to impose surgery or other special medical treatment procedures upon allegedly non-psychotic patients who refuse consent for the performance of necessary and acceptable life-improving and life-saving procedures.

Accoring to present medical legislation, quoting Hayt, Hayt and Groeschel,[1]

> "It is an established principle of law that every human being of adult years and sound mind has the right to determine what shall be done with his own body. He may choose whether to be treated and to what extent, no matter how necessary the medical care, nor how imminent the danger to his life or health if he fails to submit to treatment. Although a surgeon must be allowed some latitude in performing the operation within the scope of the patient's consent, no principle of law allows him to operate at will. In the absence of exceptional circumstances, an operation without consent or in excess of consent, express or reasonably implied, constitutes a technical assault and battery for which he is liable in damages, if any."

The physician's credo requires him to "carry out regimen for the benefit of the sick and—keep them from harm and wrong." Charged with this obligation of rendering to the best of his knowledge and ability the indicated treatment to prolong life even in moribund cases, physicians are concerned when they are impeded in their efforts by legal restrictions. There is no provision for dealing with patients who persistently refuse necessary medical treatment although warned that they may die or lead a crippling existence. The physician who performs an operation to save the conscious patient's life against his wish may be charged with assault and battery. Implied consents are admissible in emergency situations when time is of the essence and the patient cannot rationally consent to the proposed operation. Quoting again from Hayt, Hayt and Groeschel,[1]

> "When an immediate operation is imperative, and the patient's state is such that he cannot rationally consent to the proposed operation, or where such delay in obtaining the consent of the parent or guardian involves serious risk to the patient, an operation may be performed on the legal theory of implied consent. To constitute an emergency, it is not merely necessary that treatment be reasonably needed for the preservation of life, limb or health of the patient, but that the operation must be emergent in the sense that death would likely result upon failure to perform it."

The physician in these emergency situations, may call upon the psychiatrist to declare that the patient's state of mind is such that he cannot rationally consent to the proposed operation. If the psychiatrist does not find the patient irrational, then the surgeon is helpless and the physician's credo requiring him to "carry out the regimen for the benefit of the sick and . . . keep them from harm and wrong," becomes an empty phrase.

However, when a patient is admitted to a hospital following a suicidal attempt immediate therapy is applied to save his life and precautions are taken to prevent another attempt. If this suicidal patient were admitted with an incised radial artery, immediate surgery and transfusions would be given. Such treatment would be carried out despite the objections of the patient that he wants to die. Again when a patient is admitted in a comatose state, as from excessive ingestion of barbiturates, even though he left a note that he wanted to die, the hospital authorities would not respect his wishes but would employ the best therapy to save his life. In both cases, after recovery from life-threatening conditions, a psychiatric consultation would be held to determine the patient's mental status, and to apply the best method of handling the patient's situation.

When a normal person is confronted with a medical situation in which his life is in danger, his instinct for survival would impel him to cooperate with the physicians in the hope of being saved. When proper medical assistance fails, he may even seek the help of charlatans. On the other hand, an individual who refuses to avail himself of every means at his disposal to be saved cannot be considered in possession of a normal personality trait pattern. These patients consciously or unconsciously attempt self-destruction by refusing means for survival and should be considered "suicidal." For example, they may reject the necessary food and medical treatment or deliberately court dangerous situations. Nothing can now be done under existing legal procedure to prevent their self-destruction as, legally, their behavior cannot be considered abnormal.

Since these patients are suicidal, they should be considered medically emotionally disturbed or even borderline psychotic individuals and under

---

*Director, Neuropsychiatric Service, Fordham Hospital, Bronx, N. Y.

**Senior Medical Superintendent, Fordham Hospital, Bronx, N. Y.

Read at the Eastern Psychiatric Research Association Meeting in New York City, June 2, 1960.

these circumstances, legal permission should be assumed to grant the medical practitioner the right to render necessary treatment.

Discussion

Not uncommonly, patients will object to certain diagnostic procedures such as lumbar puncture, gastric analysis, encephalography, a blood Wasserman, etc. These patients can frequently be persuaded to agree after one or more sessions of explanation and reassurance. A few patients, in view of ignorance, or belief in certain cults, will in any case refuse treatment and leave the hospital. However, in emergency situations when there is no time for repeated discussions, and prompt intervention is necessary, the physician is helpless unless the patient is proved to be incompetent. The psychiatrist is placed in a precarious position, as it is difficult to properly interview a very ill patient, nor can he obtain the proper data within the short allotted time to enable him to formulate a method of approach to change the patient's mind. Therefore, the psychiatrist cannot contribute adequately to saving the patient's life unless the patient is found to be psychotic to a degree of incompetence. It can be reasoned that the patient with his lack of medical knowledge may not agree with the emergency medical or surgical procedure. Safeguards can be imposed that at least two qualified physicians agree on the decision.

It is difficult to estimate how many patients die needlessly because of their refusal to cooperate in an emergency situation when immediate medical or surgical therapy is indicated. Occasionally such instances are reported.[2,3]

"Atlantic City Hospital officials made an all-out effort to obtain parental consent to give Linda Jean Yourinka, 6, a blood transfusion, but the couple refused on religious grounds. Linda Jean died. Physicians who operated on the girl knew her chances of survival were slight even with the blood transfusion, but were disappointed that they were shackled by law from giving her the full benefit of their medical skills."

In another recent case[1] the law was more enlightened. In Indiana Judge Richard Groover, on January 13, 1960 gave two physicians authority to administer blood transfusions to an infant after birth, despite the parents' objections on religious grounds, the parents being Jehovah's Witnesses. The mother's physician and a pediatrician testified that the child might not survive without an immediate supply of new blood after birth.

The New York Times September 1, 1959 reported the case of parents who refused to allow their 19 year old daughter to undergo surgery for a tumor of the pituitary gland. Specialists at the University of Kansas Medical Center asserted that the only hope of saving the patient from total blindness and death from a tumor of the pituitary gland lay in immediate surgery.

Recently a case of an 80-year-old woman suffering from attacks of cardiac decompensation came to our attention. She refused to remain in the hospital although she lived alone and was in no physical condition to take care of herself. Without proper medical care she could not survive. Her answer was that she did not like the hospital atmosphere nor the food. She stated, "God always took care of me and He will continue taking care of me." The psychiatric consultant (J.H.F.) was unable to find any evidence of psychosis. On her insistence she was discharged.

When the health and welfare of the public at large is concerned the patient's wishes may be set aside. "A Nashville, Tennessee, father has been fined $50 for refusing to allow his three children to be inoculated with Salk polio vaccine. Ben Gamble, indicted under a 1909 law which makes it a misdemeanor not to comply with local board of health regulations, was found guilty by an all-male jury."[5]

A New Jersey Court[6,7] has ruled that the local Board of Education may force vaccination against diphtheria, regardless of protests on religious grounds, upholding the constitutionality of the 1939 law and 1952 amendment requiring diphtheria vaccination.

New Mexico's Attorney General has ruled that the State Health Department can force tuberculous patients into hospitals despite their objections.[8] A typhoid carrier would be isolated and necessary measures taken to prevent his spreading the disease even to a removal of his gall bladder If he protested he would be kept in isolation and actually made a prisoner.

If the public's health is at stake, the individual's wishes are disregarded. If an individual attempts suicide, all necessary treatment is undertaken to save his life regardless of his wishes and violent protests. Nevertheless, a person who refuses surgical therapy as a life-saving procedure is permitted to die. He also is suicidal. Under present medical legislation he may choose to be treated or not and the surgeon or medical man in the latter choice must let him die needlessly. Patients who refuse therapy as a life-saving procedure should be considered suicidal and treated accordingly. Legal permissiveness must be established granting the physician the right to render necessary and acceptable life-improving and life-saving medical procedures.

(1) A patient who refuses medical or surgical procedures to save his life, is suicidal and should be treated accordingly.

(2) Present medical legislation should be amended to empower physicians to treat a patient even against his wishes, if the patient's life is in jeopardy.

BIBLIOGRAPHY

1. Hayt, E. E., Hayt, L. R., and Groeschel, A. H.: "Law of Hospital, Physician and Patient." *Hospital Textbook Co., New York*, 1952, pp. 254, 266, 267.
2. *A.M.A. News*, Dec. 14, 1959.
3. *Am. J. Psychiatry*, 116:751, Feb. 1960.
4. *A.M.A. News*, Feb. 8, 1960.
5. *A.M.A. News*, Aug. 24, 1959.
6. *A.M.A. News*, July 27, 1959.
7. *New York Times*, Feb. 23, 1960.
8. *A.M.A. News*, Feb. 22, 1960.

Discussion

VINCENT A. LUPIANO*

The willingness of the medical profession to accept the responsibility and risk involved in imposing surgical procedures refused by the patient is an indication of the selflessness and dedication of the physician and commitment to his oath as healer of the sick in mind and body. Performance of an operation without the patient's consent may lead to a suit, not for malpractice which is based on negligence, but for wilfull assault. Ordinary malpractice insurance will not cover this contingency; insurance protection may not be obtainable or only at high cost. For these reasons alone, prudence would suggest avoidance of possible liability incurred through performing an operation on an unwilling patient.

Even in situations involving the life of the patient professional judgment is not the determining factor. The law and public policy are opposed to requiring an unwilling, though conscious and mentally competent patient of full age, to submit to an operation even though it may be necessary to save his life.

In our American tradition of personal liberty it is expected that decisions in even minor disputes be made only after due process through the courts. In contrast, decisions made within a business organization are often made by administrative authority without opportunity for review and are based on expediency for the functioning of a complex economic system. Administrative decisions, sometimes without impartial and deliberative consideration, have often had disastrous effects on individuals.

What is proposed here is to submit the patient to an administrative decision by one, or possibly two doctors; a decision which must often be made in a matter of seconds and which is not subject to review by any appellate body. Whatever benefits accrue are counterbalanced by the encroachment upon the freedom of the individual to make his own choice. To prevent extension of administrative authority over individual liberties, we must refuse the surgeon the right to perform an operation upon the body of one who is unwilling, no matter how high the price may be in terms of the patient's physical health and well-being.

Furthermore, there are constitutional problems involved which would in all probability present obstacles to the proposed legislation. Such legislation would have to be supported as falling within the reserved police powers of the several states; that is, the power to legislate for the public health, safety and morals. In a leading case, Jacobson v. Massachusetts, 197 U. S. 11, decided in 1905, the United States Supreme Court upheld a Massachusetts statute requiring adults to submit to vaccination or revaccination as a protection against smallpox. In the case of vaccination, refusal to submit would endanger the life and health of the entire community, and that is why the statute was upheld. Where the health of the general community is not at stake and only the patient is affected, and if he is a competent adult person, the police power could not, in my opinion be invoked to compel him to submit to an operation.

However, a proposal having so many worthwhile aspects should not be disposed of in an entirely negative way. Severe illness will often cloud the mind and prevent exercise of a sane and reasonable judgment. The proposal brings up the need of devising broader and more precise tests, to be made by psychiatrists and applied by the courts, for determining whether a patient, faced with a grave emergency, is able to make his own decision. In the law of trusts, estates and property, the problems of the almost incompetent, or the not-quite competent or the quasi-incompetent person often arise. These are problems which lawyers and psychiatrists must work on together.

The suggestions contained in the article by Dr. Friedman and Dr. Kapp should be an incentive to further thought, study and research. We may look forward to progress in this direction and an ultimate solution satisfactory to all concerned.

*Justice of the Supreme Court, State of New York.

UNIVERSITY OF MICHIGAN MEDICAL CENTER

POSTGRADUATE COURSE IN CLINICAL NEUROLOGY

University Hospital - Ann Arbor - Michigan

MARCH 13 AND 14, 1961

The postgraduate course in Clinical Neurology for the current year is devoted almost exclusively to a survey and appraisal of current aspects of treatment—treatment not only of those neurologic conditions most frequently encountered by the practicing physician, but also of those complications of systemic disease that affect the nervous system. Although differential diagnosis and special diagnostic procedures will obviously be mentioned and discussed, stress will at all times be placed upon therapy.

Program and application form may be obtained from

JOHN M. SHELDON, M.D., Director
Department of Postgraduate Medicine, University Hospital
Ann Arbor - Michigan

Saint Joseph Sanitarium

(Supervision of Sisters of Mercy)

P. O. BOX 236 — DUBUQUE, IOWA

or phone 3-8291 for information

Mild Mental and Nervous Cases
also
Convalescent and Rest Patients

Shock Therapy, Hydrotherapy, Physiotherapy, Occupational Therapy.
Competent Staff.

NOW AVAILABLE

LIBRARY VOLUME FILES FOR

Diseases of the Nervous System

In response to frequent requests, we are making available to subscribers a library volume file in which copies of *Diseases of the Nervous System* may be filed and stored. These files may be purchased, embossed with the volume number and year, for $2.00 each, plus 25 cents mailing fee.

PHYSICIANS POSTGRADUATE PRESS
277 BROADWAY - NEW YORK 7, N. Y.

PUBLICATION OF TRANSACTIONS

The Physicians Postgraduate Press announces its service of the prompt and accurate publication of the proceedings of professional meetings.

PHYSICIANS POSTGRADUATE PRESS
277 BROADWAY - NEW YORK 7, N. Y.

BALDPATE, Inc.

Geo. Fleetwood 2-2131 **Georgetown, Mass.**

Located in the hills of Essex County, 30 miles north of Boston

For the treatment of

psychoneuroses, personality disorders, psychoses, alcoholism and drug addiction.

Definitive psychotherapy, somatic therapies, pharmacotherapy, milieu-therapy under direction of trained occupational and recreational therapists.

HARRY C. SOLOMON, M.D.
Consulting Psychiatrist

GEORGE M. SCHLOMER, M.D.
Medical Director

FAIRVIEW Sanitarium

2828 S. PRAIRIE AVE.
CHICAGO
Phone VIctory 2-1650
J. DENNIS FREUND, M.D.
Medical Director

DEVOTED TO THE ACTIVE TREATMENT OF

MENTAL and NERVOUS DISORDERS

Specializing in Psycho-Therapy, and Physiological therapies including:

- Insulin Shock
- Electro-Shock
- Electro-Narcosis
- Out Patient Shock Therapy Available

ALCOHOLISM Treated by Comprehensive Medical-Psychiatric Methods.

BEVERLY HILLS CLINIC and SANITARIUM

210 N. Westmoreland Avenue **WHitehall 3-4651**

Dallas 11, Texas

A private clinic and hospital for nervous and mental diseases both for in-patients and out-patients —stressing a homelike environment with separate building units and special cottages—air-conditioned.

A complete neuropsychiatric diagnostic and treatment center including a department of psychology—encephalography—clinical laboratory and X-ray—psychotherapy—electroshock and insulin coma therapy, as well as psycho-surgery.

ARTHUR J. SCHWENKENBERG, M.D.
JOSEPH L. KNAPP, M.D.
JACKSON H. SPEEGLE, M.D.
Neurology

FRED H. JORDAN, M.D.
HENRY P. HARE, JR., M.D.
LUDLOW M. PENCE, M.D.
Psychiatry

A NEUROPSYCHIATRIC FOUNDATION
THE

ROGERS MEMORIAL HOSPITAL

The Hospital is situated on the Nashotah Lakes, 30 miles west of Milwaukee, providing the ideal, restful country environment and the facilities for the modern methods of therapy of psychoneuroses, psychosomatic disorders, alcoholism, and the other neurologic and psychiatric problems. Occupational therapy and recreational activities directed by trained personnel.

OCONOMOWOC, WISCONSIN
PHONE LOGAN 7-5535

EUGENE FRANK, M.D.
WILLIAM C. JANSSEN
LOREN J. DRISCOLL, M.D.

OWEN OTTO, M.D.
Medical Director

LEROY A. WAUCK, PH.D.
Clinical Psychologist
JOSEF A. KINDWALL, M.D.
Consultant

GLENSIDE HOSPITAL

FOUNDED 1909

Located in an attractive rural setting in the heart of Boston for the care of nervous, mental and geriatric disorders, alcoholism and drug addiction.

The new Ordway Therapy Unit includes the most modern electrotherapy equipment. Anesthesia by the Hand-Auden Associates and trained personnel available to courtesy staff.

RUTH M. CROSSFIELD, M.D., *Medical Director* DORIS M. HORWOOD, *Superintendent*

6 PARLEY VALE, JAMAICE PLAINS, MASS.
JAMAICA 4-0044 RATES MINIMAL

50 BEDS **HILLCREST HOSPITAL** **EST. 1905**

(formerly The Retreat, Inc.)
DES MOINES 12, IOWA

For the diagnosis and treatment of Nervous and Mental Disorders in a homelike environment.

Occupational Therapy, Physiotherapy and Shock Therapy
Open Psychiatric Staff

HERBERT C. MERILLAT, M.D., *Medical Director* HERBERT W. VETTER, *Administrator*

PINEWOOD

Dr. Joseph Epstein, F.A.P.A.
Dr. Louis Wender, F.A.P.A. **Physicians in Charge**

DR. WALTER A. THOMPSON, F.A.P.A., Clinical Director

Westchester County - Route 100 - Katonah, N. Y. - Tel.: Central 2-3155

A competent sixty bed hospital, psychoanalytically oriented but using multi-disciplinary approach. Patients admitted for "short-term" therapy or more prolonged study. Additional facilities for O.P.D., Day Center Therapy and consultation. Weekly clinical conferences open to the profession. A.P.A. members may receive staff privileges and treat their own patients.

New York City Offices

DR. EPSTEIN—975 Park Ave.—Tues., Thurs., Sat. RH 4-3700
DR. WENDER—59 East 79th St.—Mon., Wed., Fri. BU 8-0580

FAIR OAKS

INCORPORATED

SUMMIT, NEW JERSEY

A fully approved Hospital for intensive treatment and management of problems in Neuropsychiatry

OSCAR ROZETT, M.D.
Medical Director

THOMAS R. PROUT, JR.
Administrator

SANITARIA DIRECTORY

The institutions listed below are among the finest private sanitaria in the United States. They offer private, individual specialized care to the patient.

BALDPATE, INC.
GEORGETOWN, MASSACHUSETTS

BEVERLY HILLS CLINIC AND SANITARIUM
DALLAS 11, TEXAS

ELMLAWN (The Wilgus Sanitarium)
ROCKFORD, ILLINOIS

FAIR OAKS
SUMMIT, NEW JERSEY

FAIRVIEW SANITARIUM
CHICAGO, ILLINOIS

FOREST SANITARIUM
DES PLAINES, ILLINOIS

GLENSIDE
BOSTON 30, MASSACHUSETTS

HALL-BROOKE
GREEN FARMS, CONN.

HILLCREST HOSPITAL
(formerly The Retreat, Inc.)
DES MOINES 12, IOWA

PINEWOOD
KATONAH, NEW YORK

RING SANATORIUM
ARLINGTON, MASSACHUSETTS

ROGERS MEMORIAL HOSPITAL
OCONOMOWOC, WISCONSIN

ST. CLAIR HOSPITAL
DETROIT 14, MICHIGAN

ST. JOSEPH SANITARIUM
DUBUQUE, IOWA

Proven

in over five years of clinical use and
more than 750 published clinical studies

Effective

for relief of anxiety and tension

Outstandingly Safe

- simple dosage schedule produces rapid, reliable tranquilization without unpredictable excitation
- no cumulative effects, thus no need for difficult dosage readjustments
- does not produce ataxia, change in appetite or libido
- does not produce depression, Parkinson-like symptoms, jaundice or agranulocytosis
- does not impair mental efficiency or normal behavior

Miltown®

meprobamate (Wallace)

Usual dosage: One or two 400 mg. tablets t.i.d.
Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; or as MEPROTABS*— 400 mg. *unmarked*, coated tablets.

OM-2058

WALLACE LABORATORIES / *Cranbury, N. J.*

*TRADE-MARK